REMEDIAL ACTION REPORT

K. HOVNANIAN COMPANIES

Tank T408-6 (Block 408)
University Heights III - Sites C & E
Newark, Essex County, New Jersey

Spill Case# 94-12-01-1135-25

Prepared for

K. Hovnanian Companies 65 Jackson Drive Cranford, NJ 07016

Prepared by

J M Sorge, Inc. 50 County Line Road Somerville, New Jersey 08876

JMS Project 92050

March 1995

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1.0 INTRODUCTION

J M Sorge, Inc. (JMS) was retained by K. Hovnanian at Newark Urban Renewal Corp. III, Inc. (Hovnanian) to provide environmental consulting support services with regard to a discharge from an underground storage tank (UST) located near the corner of Matthew Street and Churchman Street in Newark, Essex County, New Jersey. Please note that Matthew Street was formerly known as Newark Street; Churchman Street was formerly known as Norfolk Street. A general site location map is provided as Figure 1.

The subject property is currently vacant land, although a residential structure had previously been located on the site. The City of Newark owned the property and razed the residential structure in 1993. Hovnanian purchased the vacant land from the City of Newark in late 1993 for the purpose of redeveloping the property as part of a residential condominium complex. The UST was discovered during the preliminary site grading/excavating activities associated with pre-development. Based on communications with site personnel and local officials, it was determined that the tank had apparently been used to store heating oil which fueled the furnace located in the former residential structure on this property. As a result, the tank was un-regulated and was not registered with the New Jersey Department of Environmental Protection (NJDEP).

The tank was discovered by Spectrum Constructors, Inc. (SCI) of Fairfield, New Jersey during the excavation of an area designated for the installation of a section of the site storm water control system. Due to the presence of apparent soil contamination in the vicinity of the UST system, Hovnanian immediately notified the NJDEP Hotline to report the incident, and case number 94-12-01-1135-25 was assigned to the discharge. A written Discharge Confirmation Report was then prepared and submitted to NJDEP in January 1995.

JMS was retained to provide subsurface evaluation services related to the UST discharge at the site. JMS is certified to conduct UST closure and subsurface evaluation activities (#1800007). The UST closure program commenced on December 1, 1994. The following report provides a description of the tank removal program and related remedial activities conducted at the site.

1.1 TECHNICAL OVERVIEW - COMPLIANCE WITH N.J.A.C. 7:26E

The tank closure, remedial and post-remedial activities were conducted in accordance with N.J.A.C. 7:26E-6.3 and 6.4. All samples were collected in accordance with the procedures outlined in the Department's Field Sampling Procedures Manual (May 1992) and the <u>Technical Requirements for Site Remediation</u> (N.J.A.C. 7:26E). Post-excavation soil samples were analyzed by Envirotech

Research, Inc. of Edison, New Jersey (#12543). Laboratory analytical methods were performed in accordance with the requirements outlined in N.J.A.C. 7:26E-2.1; parameters were selected based on the analytical requirements for petroleum storage and discharge areas (N.J.A.C. 7:26E-2.1[d]).

Complete copies of all laboratory analytical reports for the post-excavation samples are provided in Appendix A of this report. As indicated in the laboratory reports, all samples were submitted to the designated laboratory and analyzed within appropriate sample holding times. All laboratory method detection limits were within acceptable ranges, well below the applicable soil cleanup criteria.

The single UST at the site was the only area of concern. As expected from a discharge associated with a #2 heating oil tank, elevated levels of total petroleum hydrocarbons (PHCs) were identified in the affected soils removed during the remedial program.

2.0 FINDINGS/REMEDIAL ACTION REPORT

The former location of the 1,000-gallon, non-regulated #2 heating oil UST is illustrated on Figure 2. The following sections describe the specific tank closure and subsurface evaluation activities implemented by JMS during the removal of this UST system.

2.1 1,000-GALLON #2 HEATING OIL TANK

The tank was located on the southeast corner of Block 408. As illustrated on Figure 2, the tank was positioned approximately 50 feet north of Churchman Street and approximately 70 feet west of Matthews Street. As discussed in Section 1, the tank was discovered on December 1, 1994 during initial excavation activities associated with preparing the razed site for redevelopment; the discharge was discovered when the tank was uncovered. Tank removal was conducted on December 1, 1994 by SCI under the direct supervision of JMS personnel.

The single-walled steel tank measured 4-feet in diameter by 10-feet, 8-inches in length and had a nominal storage capacity of 1,000-gallons. The top of the tank was located approximately 4-feet below the surface (approximately 2 feet of building rubble and 2 feet of native soil).

Prior to fully uncovering the tank, the surficial soils in the area of the UST were visually inspected, and oil staining was observed. Therefore, all surficial soil was removed and stockpiled on plastic sheeting. Once all surficial soil was removed and the top of the tank was exposed, a section of the tank shell

was removed to allow for internal cleaning and inspection of the vessel. Lorco Petroleum Services, Inc. (LORCO) of Old Bridge, New Jersey was contracted to remove the residual tank contents. Inspection of the tank contents revealed the presence of old, weathered heating oil.

Following removal of all free liquids, the interior of the tank was squeegeed and wiped clean with petroleum-absorbent towels. All residuals generated from cleaning the tank were removed by LORCO utilizing an industrial vacuum tank truck. The tank residuals were transported by LORCO to their facility in Old Bridge, New Jersey. LORCO is an NJDEP-licensed waste hauler and oil recycling facility. A copy of the disposal manifest for the residual waste is provided in Appendix B.

Following internal inspection and cleaning, the tank was removed from the excavation by SCI and placed on plastic sheeting. Once secured, JMS personnel inspected the tank shell for evidence of holes or pitting. Several small holes and areas of minor deterioration were identified in the tank shell and in the area of the fill pipe. Following inspection, the empty tank shell was labeled and transported to Absolute Auto & Truck Salvage, Inc. of Middlesex, New Jersey, where it was disposed of as scrap metal. A copy of the receipt for this transfer is provided in Appendix B.

Following tank removal, the excavation was expanded to remove all tank envelope material and surrounding affected soils. excavation was expanded based on visual observations and screening with a photoionization detector (PID). Since this area of the site was designated for the installation of a section of the site storm water control system, all potentially affected soils were removed to ensure that no significant residual oil contami-Soil excavation activities commenced on Decemmation remained. ber 1, 1994 but were delayed due to weather and site construction activities. Soil excavation activities were completed on December 14, 1994. The final excavation was irregularly shaped and measured an average of approximately 30-feet wide by an average of approximately 45-feet long. The total base area of the excavation was approximately 1,350 square feet. The base of the excavation was located approximately 10.5-feet below grade. Native clay soil was encountered at a depth of 10-feet below grade. No groundwater was encountered in the excavation. on a review of data from numerous nearby sites, groundwater at the subject site is expected to occur at a depth of approximately 20 feet below grade. The configuration of the final excavation is illustrated on Figure 2.

Following soil excavation activities, the base and sidewalls of the excavation were inspected and field screened with a PID; no PID readings were obtained. Therefore, on December 14, 1994 JMS collected a total of eight (8) post-excavation soil samples (T408-6PE1 through T408-6PE8). Post-excavation samples were collected in accordance with N.J.A.C. 7:26E-6.4(a)2.ii.(2). Six

(6) soil samples were collected from the base of the excavation sidewalls, resulting in the collection of one sample for approximately every 25 feet of sidewall. Two (2) soil samples were collected from the bottom (base) of the excavation, resulting in the collection of one sample for approximately every 675 square feet of bottom area. The approximate location of each postexcavation soil sample is illustrated on Figure 2.

All samples were analyzed for PHCs. The laboratory analytical results for these analyses are summarized on Table 1. The complete laboratory report is provided in Appendix A. As the results indicate, no PHCs were detected above the laboratory method detection limit of 25 parts per million (ppm).

3.0 SITE RESTORATION AND RESIDUALS DISPOSAL

Since the area of the UST was located within an area designated for the construction of a storm water control system for the site, the excavation was backfilled in stages according to the site construction schedule. A total of approximately 100 tons of clean stone, obtained from Millington Quarry, Inc. was used to backfill portions of the excavated area. The stone material was used in the areas associated with the construction of the storm water control system. Fill delivery tickets/receipts for this material are provided in Appendix C. Since the entire redevelopment project area has a net soil export, the remainder of the excavated area was backfilled with clean, native soils obtained from other portions of the redevelopment site. The storm water system was constructed and the entire area was then brought to the grade required under the site development plan.

As discussed in Section 2, the residual tank contents were transported to the LORCO facility in Old Bridge, New Jersey for recycling (Appendix B). Approximately 450 cubic yards of affected soils were removed during the tank closure program. All soils were stockpiled on, and covered with, 6-mil polyethylene sheeting pending appropriate off-site removal. Soil reuse arrangements were then secured in accordance with the procedures outlined in the Department's <u>Guidance Document for the Remediation of Contaminated Soils</u>.

Prior to obtaining reuse approval from NJDEP, composite samples were collected from the stockpiled material and the samples were analyzed in accordance with the designated recycling facility's permit requirements. A total of five (5) composite samples were analyzed for PHC using both method 418.1 and method 8015. One sample was also analyzed fro TCLP metals, PCBs, total organic halides and RCRA characteristics. A copy of the laboratory report for this analyses is provided in Appendix D.

Based on the sample results obtained, it was determined that the soil was considered non-hazardous. Therefore, an exemption to the solid waste flow regulation (N.J.A.C. 7:26-6) was obtained from NJDEP, Bureau of Medical Waste and Technical Assistance for shipment of the soil to an approved facility for reuse. All non-hazardous petroleum contaminated soil (total of 683.9 tons) was then transported to the Soil Remediation of Philadelphia, Inc. (SRP) facility in Philadelphia, Pennsylvania for appropriate reuse/recycling. The soil was removed from the Hovnanian site to the SRP facility on February 9 and 10, 1995. Copies of the NJDEP waste flow exemption approval, the non-hazardous material manifests and the final certificate of destruction/recycling are provided in Appendix E.

4.0 CONCLUSION AND RECOMMENDATIONS

JMS has implemented an UST investigation at the Hovnanian property located in Newark, New Jersey. The investigation addressed a previously abandoned, 1,000-gallon non-regulated heating oil tank which was identified during initial development activities at the site.

All remedial activities were conducted in accordance with N.J.A.C. 7:26E. The results of the post-excavation, verification soil samples have confirmed the effectiveness of the remedial activities conducted at the site. No contaminants remain in excess of the most stringent Soil Cleanup Criteria currently proposed by NJDEP, and no further action is proposed. Therefore, it is requested that the Department close the spill case associated with the discharge at this property.

5.0 TWO-PART CERTIFICATION

PART A

The following certification shall be signed by the highest ranking individual with overall responsibility for implementing the remediation of a site:

"I certify under penalty of law that the information provided in this document is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties."

Printed Name: CORERT D. JACKSI.	Title: Intsiden -
Signature:	Date: 3/14/95
Sworn and Subscribed Before Me	
on this <u>fourtural</u>	
Date of March	, 1995
Kelly Bagan	
Notary	

KELLY HIGGINS NOTARY PUBLIC OF NEW JERSEY My Commission Expires May 25, 1998

KH0V005262

PART B

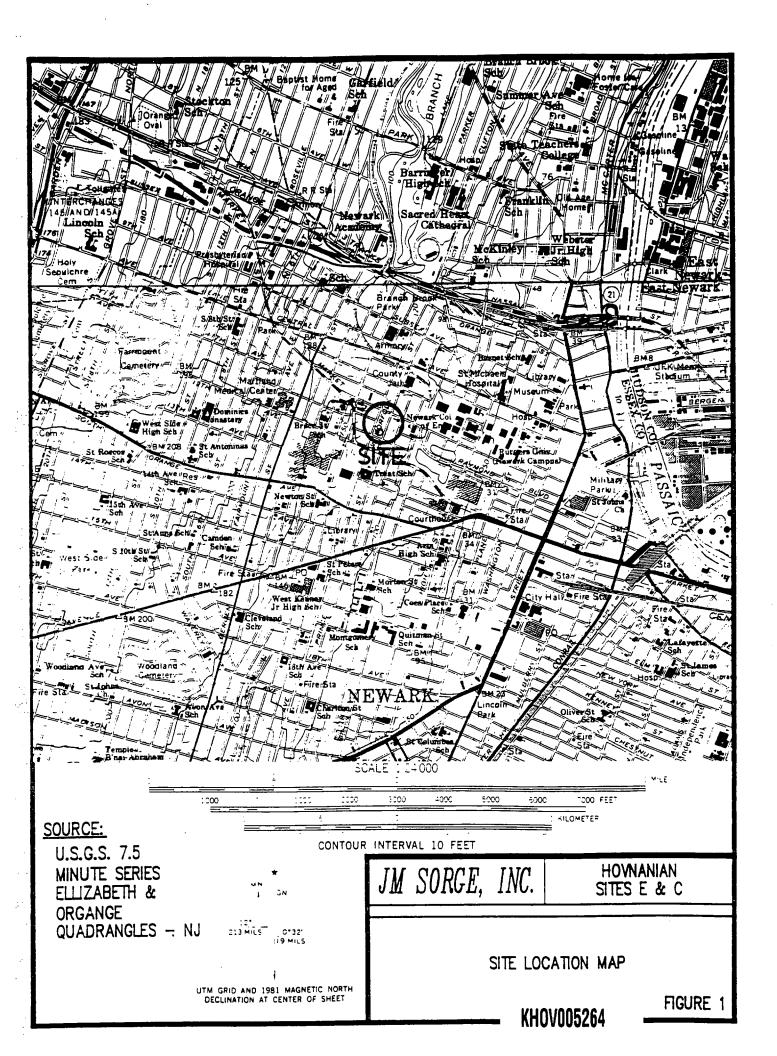
The following certification shall be signed as follows:

- i. For a corporation, by a principal executive officer of at least the level of vice president;
- ii. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively;
- iii. For a municipality, State, Federal, or other public agency, by either a principal executive officer or ranking elected official; or
 - iv. For persons other than i. through iii. above, by the person with legal responsibility for the site.

"I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties."

Printed Name: LOSCAT H. LACKSON	Title: 145/Peri
Signature:	Date: 3/14/45
	,
Sworn and Subscribed Before Me	
on this <u>fourtuntl</u>	
Date of March	, 1995
Kelly though	
Notary /	
KELLY LIIOONIO	

KELLY HIGGINS
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires May 25, 1998



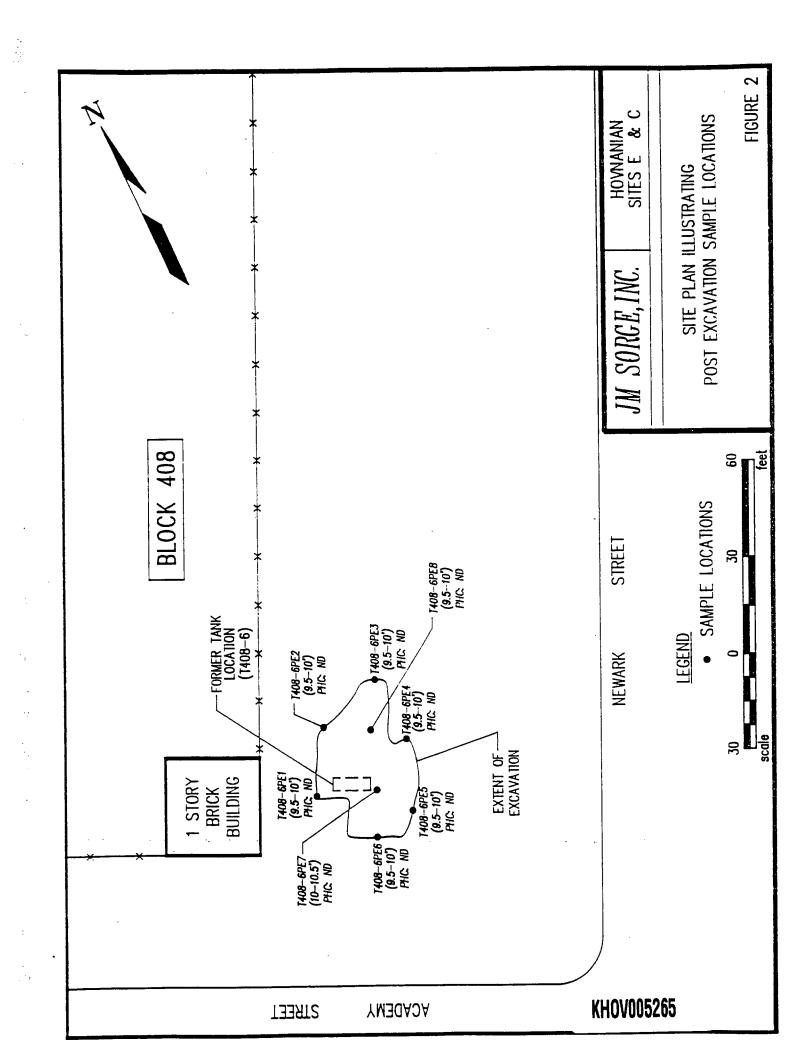


TABLE 1 HOVNANIAN SOIL SAMPLING RESULTS SUMMARY

SAMPLE NUMBER LABORATORY SAMPLE NUMBER SAMPLE DEPTH (#) DATE COLLECTED	PROPOSED SOIL CLEANUP STANDARD	T408-6-PE-1 17716 9.5-10 12/14/94	T-408-8-PE-2 17717 9-5-10 12/14/94	T-408-6-PE-3 17718 9.5-10 12/14/94	T408-6-PE4 17719 9.5-10 12/14/94	T408-6-PE-5 17720 9.5-10 12/14/94	T408-6-PE-8 17721 9.5-10 12/14/84	T-408-6-PE-7 17722 10-10.5 12/14/94	T408-6-PE-8 10-10-5 12/14/84
PETROLEUM HYDROCARBONS (ppm)	10000	QV	QN	Q	Q	Q	Q	Q	ND

ppm - Parts Per Million

NOTES

ND - Not Detected

KH0V005266

APPENDIX A LABORATORY ANALYTICAL REPORT

CHECKED III _ 1212	clit
PATA TITTE	

777 New Durham Road Edison, New Jersey 08817 Tel: (908) 549-3900 Fax: (908) 549-3679

December 19, 1994

J.M. Sorge, Inc. 50 County Line Road Somerville, NJ 08876

Attention: Mr. Chris Finley

Re: Job No. I257 - Hovnanian

Dear Mr. Finley:

Enclosed are the results you requested for the following sample(s) received at our laboratory on December 15, 1994:

Lab No.	Client ID	Analysis Required
17717	T400 C DF 1	DUC
17716	T408-6-PE-1	PHC
17717	T408-6-PE-2	PHC
17718	T408-6-PE-3	PHC
17719	T408-6-PE-4	PHC
17720	T408-6-PE-5	PHC
17721	T408-6-PE-6	PHC
17722	T408-6-PE-7	PHC
17723	T408-6-PE-8	PHC

Please call me at 908 549-3900 if you have any questions.

Very truly yours,

Michael J. Urban Laboratory Manager

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Analytical Results Summary		18
MS/MSD and Blank Results Summary		19
IR Spectra		20

Site: Hovnanian

Lab Job No: I257

Date Sampled: 12/14/94
Date Received: 12/15/94

Date Extracted: 12/15/94
Date Analyzed: 12/15/94

Matrix: SOIL

QA Batch 2966

PETROLEUM HYDROCARBONS

Envirotech Sample #	Client ID	% Moisture	Dilution Factor	Analytical Result mg/kg (Dry Wt.)
17716	T408-6-PE-1	13.2	1.0	ND
17717	T408-6-PE-2	15.3	1.0	ND
17718	T408-6-PE-3	15.€	1.0	ND
17719	T408-6-PE-4	11.7	1.0	ND
17720	T408-6-PE-5	13.8	1.0	ND
17721	T408-6-PE-6	13.7	1.0	ND
17722	T408-6-PE-7	13.9	1.0	ND
17723	T408-6-PE-8	14.8	1.0	ND

Quantitation Limit for Petroleum Hydrocarbons is 25 mg/kg for an undiluted sample.

Job # 7 257

PROJECT NAME: HOUMANIAM - NEWARK

PROJECT No.: 92050

JIL SORCE, INC.

COLLECTED BY: A. CONFORTION

SIGNATURE: Janahan Z

CITAIN OF CUSTODY RECORD

C.O.C. No.: 2169

	REMARKS	& 24 HR	TURNAMOUND PHONE PENTS	TO J. CLAMBY	ADDITIONAL ANALYTES.	y	
ANALYTICAL	PARAMETERS	21771	LI TIT	81221	17719	17720	17721
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	ION	7 2	7	14 14	لا .	45	य है।
Z	DESCRIPTION	9.5-10'	9.5-10'	9.6-10'	9.5-10'	9.5-10	9.5-10'
NFORMATIO	MATRIX	5016					->
SAMPLE INFORMATIO	TIME	1045#85	5111	1135	1145	1200	1315
	DATE	DEC. 14,1004					_ ->
	NUMBER	7408-6	T408.4	7408 - 6 PES	7408 · 6	7408 · U	7408-V PEB

DEI INOIlleHED BY	COMPANY	DATE/TIME	RECEIVED BY	COMPANY	DATE/TIME	REMARKS
		12.15.94	11 4 11	,	15.15.94	
	JMSI	29 50 MPS	Moren 1 22 less	Fauretech	0530	
Vicar O P. Co.		19/15/44	1101 M. CAUR	Env. vtal	12/15/44	
Will Mill	Euch	11/1/11/11	Hay Signer	HOWARD SCHULZE	12/11/47 10. 13.31	Boz 6 kus Only
KHOVO	Ensigtes	Enviotes 12/16/44 18 26	That Much	J.2M.J.	1/21	Cety/NED 1
05271						

8 st 6 1651 0.17 **HEMARKS** REMARKS JH SOIRE, INC. C.O.C. No.: 2169 12/15/64 10 sun DATE/TIME 7723 12/16/164 7722 7-1524 **PAHAMETERS** ANALYTICAL 05.50 OWARD SCHULZE COMPANY FAKINIEL 15W[Lnvisteil 13 1V PORC * K 19 Me CITAIN OF CUSTODY RECORD SIGHATURE: Thropher 92050 DESCRIPTION RECEIVED BY PROJECT No.: _ 10-10.5' 10-10.5 INFORMATION 12/15/97 COMPANY DATE/TIME 09501125 17/11/64 1.34 MATRIX HOWARD SCHULZE 12/16/59
EDIVIDED OF THESEARCH INC 1820 2017 PROJECT NAME: HOVNANIAN - NEWARK COLLECTED BY: A. CONFORDA ! Emisteil SAMPLE TIME JWWT 1340 1400 Dec. 14,1994 DATE HELINQUISHED BY NUMBER T408-4 7408-6 KH0V005272 PEZ PE B

ENVIROTECH RESEARCH, INC.

Client:	J.M. Sorg	ge, Inc.		Date Sampled:		12/14/94 -	
Site:	Hovanian	l .		Date Received:		12/15/94	
Matrix:	SOLID			Jo	b No.:	1257	
Sample No.:	17716						
Anal Paran	ytic neter	Extraction Date	Extractor's Name	Analysis Date		Analyst's Name	QA Batch
PET HYDROCAL	RBONS	12-15-94	PN	12-15-94			2961
PPBN+15					<u> </u>		
							-

ENVIROTECH RESEARCH, INC.

Client: J.M. Sorge, Inc. Site: Hovanian Matrix: SOLID			Date Sa	mpled:	12/14/94		
			Date Received:		12/15/94		
				J	Job No.:		1257
Sample No.:	17717						
Anal Paran		Extraction Date	Extractor's Name	Analysis Date		Analyst's Name	QA Batch
PET HYDROCAL	RBONS	12-15-94	AV	12-15-94	16	<u> </u>	2965
PPBN+15							

ENVIROTECH RESEARCH, INC.

. Client:	J.M. Sorg	ge, Inc.		Date Sam	mpled: 12/14/94		
Site:	Hovanian)	450 · · · · · · · · · · · · · · · · · · ·	Date Received:		12/15/94	
Matrix: SOLID			· · · · · · · · · · · · · · · · · · ·	Job No.:		1257	
Sample No.:	17718						
Anal Paran		Extraction Date	Extractor's Name	Analysis Date		Analyst's Name	QA Batch
PET HYDROCA	RBONS	12-15-94	PM	12-15-94	161	5	2966
PPBN+15			1				

ENVIROTECH RESEARCH, INC.

Client: J.M. Sorge, Inc. Site: Hovanian Matrix: SOLID			Date Sam	oled: 12/14/9		
			Date Recei	ved: 12/15/9		
			*	Job		
Sample No.:	17719		·			
Anal Paran	ytic neter	Extraction Date	Extractor's Name	Analysis Date	Analyst' Name	s QA Batch
PET HYDROCAL	RBONS	17-15-94	FN	12-15-94	Kb	1966
PPBN+15	_					
				-		

ENVIROTECH RESEARCH, INC.

Client:	J.M. Sor	ge, Inc.		Date Sam	pled: 12/14/94	12/14/94	
Site: Hovanian Matrix: SOLID			Date Received: 12/15/94				
			- Company Comp	Job No.: 1257			
Sample No.:	17720						
Anal Paran		Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch	
PET HYDROCAI	RBONS	12-15-94	[N	12 - 17- 94	KB	2966	
PPBN+15			!		,		

ENVIROTECH RESEARCH, INC.

Client: J.M. Sorge, Inc.		· · · ·	Date Sa	Date Sampled:		12/14/94	
Site:	Hovania	n	 	Date Re	ceived:	12/15/94	
Matrix:	SOLID		···	J	ob No.:	1257	
Sample No.:	17721						
Anal Paran		Extraction Date	Extractor's Name	Analysis Date		Analyst's Name	QA Batch
PET HYDROCAL	RBONS	12-15-94	en	17-15-94	K 6	,	2966
PPBN+15							
							

ENVIROTECH RESEARCH, INC.

Client: J.M. Sorge, Inc.			<u> </u>	Date San	ipled: 12/14/94	: 12/14/94	
Site:	Hovanian			Date Rec	eived: 12/15/94		
Matrix: SOLID			Jol	b No.: 1257			
Sample No.:	17722	* -					
Anal Paran		Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch	
PET HYDROCAL	RBONS	12-15-94	PN	12-16-94	16B	2960	
PPBN+15							

ENVIROTECH RESEARCH, INC.

Client:	J.M. Sor	ge, Inc.		Date San	npled:	12/14/94	
Site:	Hovania	n		Date Received:		12/15/94	
Matrix: SOLID				Job No.:		1257	
Sample No.:	17723						
Anal Paran		Extraction Date	Extractor's Name	Analysis Date		nalyst's Name	QA Batch
PET HYDROCAL	RBONS	12-15-94	PN	12-15-94	16	3	2960
PPBN+15							
							
							-

Analytical Methodology Summary

Volatile Organics:

Water samples are analyzed for volatile organics by purge and trap GC/MS as specified in EPA Method 624. Solid samples are analyzed for priority pollutant volatile organics as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8240. Water samples are analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) by GC-PID as specified in EPA Methods 503.1 and 602. Solid samples are analyzed for BTEX as specified in EPA Method 8020.

Acid and Base/Neutral Extractable Organics:

Water samples are analyzed for acid and/or base/neutral extractable organics by GC/MS in accordance with EPA Method 625. Solids are analyzed for acid and/or base/neutral extractable priority pollutants as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8270.

GC/MS Nontarget Compound Analysis:

Analysis for nontarget compounds is conducted, upon request, in conjunction with GC/MS analyses by EPA Methods 624, 625, 8240 and 8270. Nontarget compound analysis is conducted using a forward library search of the EPA/NIH/NBS mass spectral library of compounds at the greatest apparent concentration (10% or greater of the nearest internal standard) in each organic fraction (15 for volatiles, 15 for base/neutrals and 10 for acid extractables).

Organochlorine Pesticides and PCBs:

Water samples are analyzed for organochlorine pesticides and PCBs by dual column gas chromatography with electron capture detectors as specified in EPA Method 608. Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8080.

Total Petroleum Hydrocarbons:

Water samples are analyzed for petroleum hydrocarbons by I.R. using EPA Method 418.1. Solid samples are prepared for analysis by soxhlet extraction consistent with the March 1990 N.J. DEP "Remedial Investigation Guide" Apendix A, page 52, and analyzed by U.S. EPA Method 418.1.

Metals Analysis:

Metals analyses are performed by any of four techniques specified by a Method Code provided on each data report page, as follows:

- P Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP)
- A Flame Atomic Absorption
- F Furnace Atomic Absorption
- CV Manual Cold Vapor (Mercury)

Water samples are digested and analyzed using EPA methods provided in "Methods for Chemical Analysis of Water and Wastewater" (EPA 600/4-79-020). Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition); samples are digested according to Method 3050 "Acid Digestion of Soil, Sediments and Sludges."

Specific method references for ICP analyses are water Method 200.7 and solid Method 6011. Mercury analyses are conducted by the manual cold vapor technique specified by water Method 245.1 and solid Method 7471. Other specific Atomic Absorption method references are as follows:

_			Test Method		Test Method
<u>Element</u>		<u>Flame</u>	<u>Furnace</u>	<u>Flame</u>	<u>Furnace</u>
Aluminum		202.1	202.2	7020	
Antimony		204.1	204.2	7040	7041
Arsenic			206.2		7060
Barium		208.1		7080	
Beryllium		210.1	210.2	7090	7091
Cadmium		213.1	213.1	7130	7131
Calcium		215.1		7140	
Chromium,	Total	218.1	218.2	7190	7191
Chromium,	(+6)	218.4	218.5	7197	7195
Cobalt		219.1	219.2	7200	7201
Copper		220.1	220.2	7210	
Iron		236.1	236.2	7380	
Lead		239.1	239.2	7420	7421
Magnesium		242.1		7450	
Manganese		243.1	243.2	7460	
Nickel		249.1	249.2	7520	
Potassium		258.1		7610	
Selenium			270.2		7740
Silver		272.1	272.2	7760	
Sodium		273.1		7770	·
Tin		283.1	283.2	7870	
Thallium		279.1	279.2	7840	7841
Vanadium		286.1	286.2	7910	7911
Zinc		289.1	289.2	7950	
			205.2		

Cyanide:

Water samples are analyzed for cyanide using EPA Method 335.2. Cyanide is determined in solid samples as specified in the EPA Contract Laboratory Program IFB dated July 1988, revised February 1989.

Phenols:

Water samples are analyzed for total phenols using EPA Method 420.1. Total phenols are determined in solid samples by preparing the sample as outlined in the EPA, Contract Laboratory Program IFB for cyanide, followed by a phenols determination using EPA Method 420.1.

Cleanup of Semivolatile Extracts:

Upon request Method 3611 Alumina Column Cleanup and/or Mehtod 3650 Acid-Base Partition Cleanup are performed to improve detection limits by the removal of saturated hydrocarbon interferences.

Hazardous Waste Characteristics:

Samples for hazardous waste characteristics are analyzed as specified in the U.S. EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition). Specific method references are as follows:

Ignitability - Method 1020

Corrosivity - Water pH Method 9040 Soil pH Method 9045

Reactivity - Chapter 7, Section 7.3.3 and 7.3.4 respectively for hydrogen cyanide and hydrogen sulfide release.

Toxicity - TCLP Method 1311

Miscellaneous Parameters:

Additional analyses performed on both aqueous and solid samples are in accordance with methods published in the following references:

- Test Methods for Evaluating Solid Wastes, SW-846 3rd Edition, November 1986.
- Standard Methods for the Examination of Water and Wastewater, 17th Edition.
- Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, 1979.

KH0V005283

DATA REPORTING QUALIFIERS

- ND The compound was not detected at the indicated concentration.
 - B The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

NON-CONFORMANCE SUMMARY

Envirotech Research, Inc. Job Number: 1257
Volatile Organics Analysis:
All data conforms with method requirements; or Analysis was not requested; or Non-conformance for the specific samples listed is as follows:
See continuation page if checked ()
Base/Neutral and/or Acid Extractable Organics:
All data conforms with method requirements; or Analysis was not requested; or Non-conformance for the specific samples listed is as follows:
See continuation page if checked ()
PCBs and/or Organochlorine Pesticides:
All data conforms with method requirements; or Analysis was not requested; or Non-conformance for the specific samples listed is as follows:
See continuation page if checked ()

Page 1 of $\underline{\mathcal{V}}$

Non-conformance Summary, Page 2 of 2 Envirotech Research, Inc. Job Number:
Metals Analysis:
All data conforms with method requirements; or Analysis was not requested; or Non-conformance for the specific samples listed is as follows:
See continuation page if checked ()
Total Petroleum Hydrocarbons:
All data conforms with method requirements; or Analysis was not requested; or Non-conformance for the specific samples listed is as follows:
See continuation page if checked ()
General Chemistry/Disposal Parameters:
All data conforms with method requirements; or Analysis was not requested; or Non-conformance for the specific samples listed is as follows:
See continuation page if checked ()
Signature of Laboratory Manager: Date: 12/19/94

Site: Hovnanian Lab Job No: I257

Date Sampled: 12/14/94 Date Extracted: 12/15/94 Date Received: 12/15/94 Date Analyzed: 12/15/94

Matrix: SOIL QA Batch 2966

PETROLEUM HYDROCARBONS

Envirotech Sample #	Client ID	% Moisture	Dilution Factor	Analytical Result mg/kg (Dry Wt.
17716	T408-6-PE-1	13.2	1.0	ND
17717	T408-6-PE-2	15.3	1.0	ND
17718	T408-6-PE-3	15.6	1.0	ND
17719	T408-6-PE-4	11.7	1.0	ND
17720	T408-6-PE-5	13.3	1.0	ND
17721	T408-6-PE-6	13.7	1.0	ND
17722	T408-6-PE-7	13.9	1.0	ND
17723	T408-6-PE-8	14.8	1.0	ND

Quantitation Limit for Petroleum Hydrocarbons is 25 mg/kg for an undiluted sample.

PETROLEUM HYDROCARBONS

Matrix: SOIL Matrix Spike - Lab Sample No: 17487

QA Batch No: 2966 MS Sample from Lab Job No: I227

BLANK	CONC.	QUANTITATION	LIMIT
(mg/k	ig)	(mg/kg)	
NI)	25	=====

SPIKE	SAMPLE	MS	MS	QC	1
ADDED	CONCENTRATION	CONCENTRATION	%	LIMITS	
(mg/kg)	(mg/kg)	(mg/kg)	REC	REC	
572	47.6	597	96.0	81-115	

Ì	SPIKE	MSD	MSD	į		
	ADDED	CONCENTRATION	%	જ	QC LIMITS	
ł	(mg/kg)	(mg/kg)	REC	RPD	RPD	REC
:	========	===========	=====	=====	======	========
	572	601	96.7	0.73	18	81-115
	572	601	96.7	0.73	18	81-115

SPIKE ADDED CONCENTRATION is adjusted for % Solids

********************* Envirotech Research. Inc. Test Method for Oil and Grease and Petroleum Hydrocarbons in Water and Soil Perkin-Elmer Mode: 1600 FT-IF Analysis Report 94/12/15 15:51 Sample identification Initial mass of sample, q 000,000 Volume of sample after extraction, mi 100,000 gilution factor. 1 = no dilution 1..000 percent solids, 100% = erv soil or water sample 86.8 Petroleum hydrocarbons, ppm 23.599 Met absorbance of hydrocarbons 12920 tem. 0.012 Y: Petroleum hydrocarbons spectrum 15:51 100.96

3999

3200

Cimin

2800

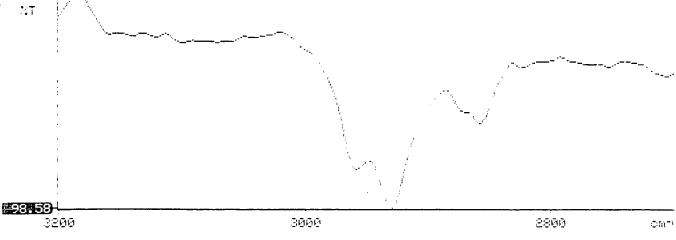
**************************** Envirotech Research, Inc. Test Method for Oil and Grease and Petroleum Hydrocarbons in Water and Soll Perkin-Elmer Model 1600 FT-IF: Analysis Report 00/12/15 15:53 Sample identification initial mass of sample, q TO.000 Volume of sample after extraction, ml 100,000 dilution factor, 1 = no dilution percent solids, 100% = dry soll or water sample 50.000 84.7 Petroleum hydrocarbons, pom 7.947 ofst absorbance of hydrocarpons (2980 comit ...006 15:53 Y: Petroleum hydrocarbons spectrum

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3200

 $\odot m^{-1}$

Envirotech Research, Inc. Test Method for Oil and Grease and Petroleum Hydrocarbons in Water and Soil Perkin-Elmer Model 1600 FT-IR Analysis Report 94/12/15 15:55 Sample identification Initial mass of sample, g 30.000 Volume of sample after extraction, mi dilution factor. 1 = no dilution percent solids, 100% = dry soil or water sample 100,000 84.4 Petroleum hydrocarbons, ppm 0.172 Net absorbance of hydrocarbons 12970 comits 1.007 Ġ. Y: Petroleum hydrocarbons spectrum 15:55 100.76 3.7



Ж. Envirotech Research, Inc. Test Method for Oil and Grease and Petroleum Hydrocarbons in Water and Soil * Perkin-Elmer Model 1600 FT-IR Analysis Report 94/12/15 15:57 Sample identification Initial mass of sample, q Volume of sample after extraction, mi % dilution factor, 1 = no dilution ...OOO 4 percent solids, 100% = dry soil or water samble 88.3 محد Petroleum hydrocarbons, ppm 4.460 5.051 Net absorbance of hydrocarbons (2930 cm-1) 0.005 Y: Petroleum nydrocarpons spectrum 15:58 100.54 3299 និមិមិមិ 2800 C:50°1

潔 Envirotech Research. Inc. × Test Method for Uil and Grease and Petroleum Hydrocarbons in Water and Soil Perkin-Elmer Model 1600 FT-IR Analysis Report 04/12/15 15:59 Sample identification Initial mass of sample, q 30.000 Volume of sample after extraction, ml 100.000 dilution factor, 1 = no dilution owncent solids, 100% = dry soil or water sample 00:000 86.2 Petroleum hydrocarbons, ppm Met absorbance of hydrocarbons (2930 cm-1) 9.010 15:00 M: Petroleum hydrocarbons spectrum 100.58

3999

3200

 $\odot m^{-1}$

Envirotech Research, Inc. Test Method for Oil and Grease and Petroleum Hydrocarbons in Water and Soil Perkin-Elmer Model 1600 FT-IF Analysis Report 94/12/15 16:31 Sample identification Initial mass of sample, q 30.000 Volume of sample after extraction, al # dilution factor, 1 = no dilution 1.000 percent solids, 100% = dry soil or water sample 86.300 Petroleum hydrocarbons, ppm Met absorbance or hydrocarbons (2930 cm-) 0.007 Y: Petroleum nydrocarpons spectrum 16:31 #99**.** 99-::T

3999

3200

 $\mathbb{C} \mathfrak{M}^{-1}$

Envirotech Research, Inc. $\frac{1}{T}.$ Test Method for 米 Oil and Grease and Petroleum Hydrocarbons in Water and Soil \mathcal{X} Perkin-Elmer Model 1600 FT-IP Analysis Report 94/12/15 16:03 Sample identification Initial mass of sample, o JO.000 Volume of sample after extraction, ml % dilution factor, 1 = no dilution 1,000 κ bencent solids, 100% = dry soil or water sample 1. 38 000,000 metroleum hydrocarbons, ppm Het absorbance of hydrocarbons (2930 cm-: 0.004 Y: Petroleum hydrocarbons spectrum 16:04 100.42

3666

3299

 $\odot m^{-1}$

99/12/15 16:05

Sample adentification

Initial mass of sample, g 30.000

Volume of sample after extraction, ml

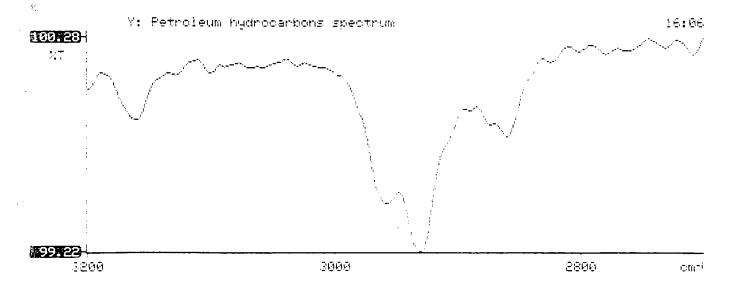
> dilution factor, 1 = no dilution > 1.000

 \approx percent solids, 100% = dry soil or water sample $\frac{200.000}{85.2}$

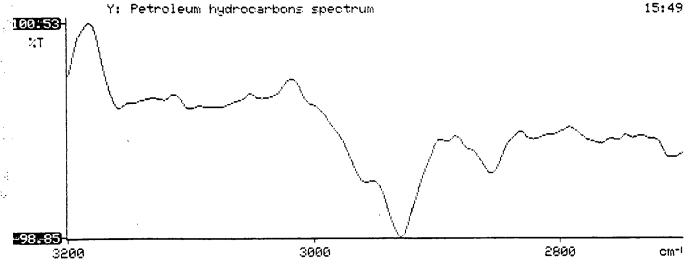
Petroleum hydrocarbons, ppm

3.700

Net absorbance of hydrocarbons (2930 cm-1: 0.004



Envirotech Research, Inc. Test Method for Oil and Grease and Petroleum Hydrocarbons in Water and Soil * Ferkin-Elmer Model 1600 FT-IR * Analysis Report 94/12/15 15:49 Sample identification 12/15 PBS 2 Initial mass of sample, g 30.000 Volume of sample after extraction, ml 100.000 dilution factor, 1 = no dilution * percent solids, 100% = dry soil or water sample 100.000 Petroleum hydrocarbons, ppm Met absorbance of hydrocarbons (2930 cm-1) 0.004 4.

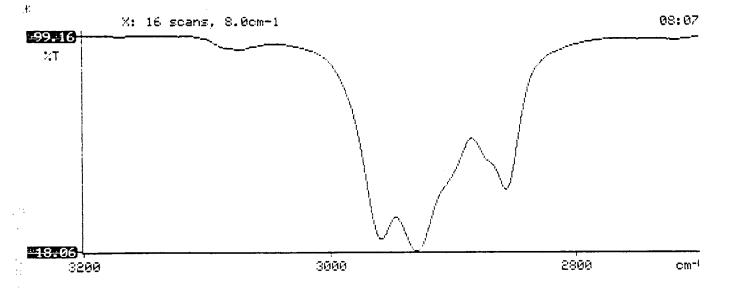


```
Envirotech Research, Inc.
*
                                            *
                                            *
                Test Method for
     Oil and Grease and Fetroleum Hydrocarbons
               in Water and Soil
                                            *
                                            *
          Perkin-Elmer Model 1600 FT-IR
               Calibration Report
94/12/15 12:25
*
  Concentrations of standards, mg/100 ml
39.950
19.975
7.990
0.799
0.399
¥
  Net absorbance of standards
0.738
0.374
0.152
0.016
0.008
4.
ж
ķ
        LSF: slope 0.018; y-intercept 0.002; correlation 0.99997
 1.0
  γ
 -0.2
                                                         39.9
                                                      ×
      0.4
```

Concentration of standard, mg/100 ml 39.950

Net absorbance of standard 0.738

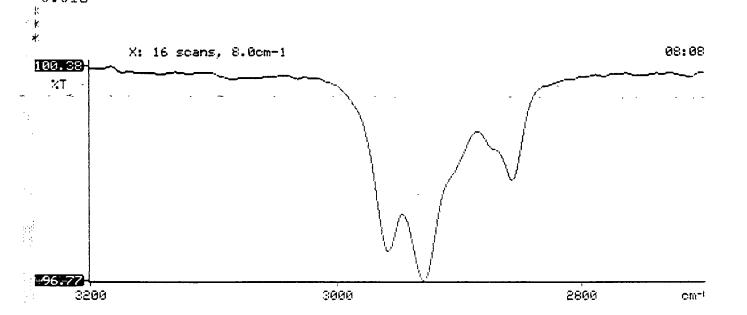
k E



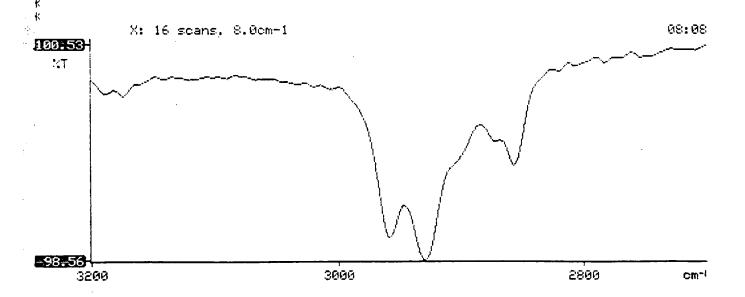
Concentration of standard, mg/100 ml 0.799

k

* Net absorbance of standard

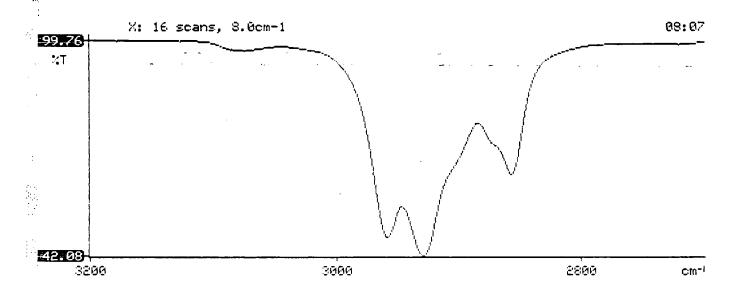


 Net absorbance of standard 0.008



Concentration of standard, mg/100 ml 19.975

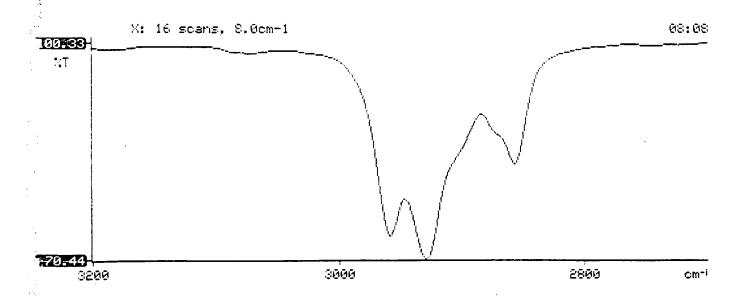
Net absorbance of standard 0.374



Concentration of standard, mg/100 ml 7,990

Met absorbance of standard 0.152

 \mathbb{R}^2



APPENDIX B

TANK CLEANING AND DISPOSAL RECEIPTS

LOVAPINE 15 W LOVAPINE 15 W LIGHON HUR MIL

4° ·



10.50

RD1 Box 5A Old Bridge, N.J. 08857

	Tel: 908-721-0	0900 • Fax(908) 721-0231
SOLD	TO: Housenite Proj.	ect BILL TO: J.M. Sors E
	Nonfolk + Mythe	<u> </u>
CONT	ACT:	ATTN:
ACCT.	ORDER DATE DRIVER	JOB SCHEDULED FOR
PHONE	# EPAID#	CUSTOMER PO # TERMS
#	TYPE OF WORK	TYPE OF MATERIALS
1	Dump out 550	W,+K- 1011
2	t clean	
SPECI	AL INSTRUCTIONS:	
	SP4EEB3E479E2E373EBCD7AEB2EB4EAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	THIS WORK HAS BEEN INSPECTED AND PERFORMED TO THE CUSTOMER'S SATISFACTION. SIGNATURE: This order has been signed and confirmed by the customer that L. & L. Oil Service has left the grounds in good condition and is not responsible for any spills or soil contamination.
	WHITE/OFFICE Y	ELLOW/DRIVER PINK/CUSTOMER



RD1 Box 5A Old Bridge, N.J. 08857 (908) 721-0900 Fax (908) 721-0231

STANDARD COLLECTION ORDER FORM

	GENERATOR/LOCATION	OFFICE USE ON		-	BILL	TO (IF DIFFERE	 ENT FROM L	OCATION)
INFORMATI	ONATTENTION LINE Project	COUNT APPROVAL CODE:		NAME INFORMATION/AT	TENTION LINE	Sorge	AC	COUNT APPROVAL CODE
DELIVERY				DELIVERY ADDRE				
No r	tolk + mathew	ATT 710		0.77				
	wark	ATE ZIP	I '	CITY			5	TATE ZIP
PHONE NU		DER NUMBER	- 1	PHONE NUMBER			PURCHASE OR	DER NUMBER
USA EPA ID	NO. (IF APPLICABLE) STATE ID NO.			,	MANIFEST	5 5		
					MANIFEST NUMBER	20314/	-/_3	
This is to d	certify that the below named materials are properly classifier			ORMATIO		condition for transports	tion according to	the applicable requiations of the
Departmen NO.	nt of Transportation. TYPE QTY. UNIT					ne, Hazard Class and	_	SALES REPRESENTATIVE
		000011	Description (ii	tolding Proper	Shipping Wai	ne, nazaro Class and	ID Number)	
		s	ERVICE S	ECTION				
SALES	DESCRIPTION	WASTE CODE	QUANT	TTY (UNIT OF MEAS	JRE PRICE	TAX	LINE
40500	USED OIL REMOVAL							
40501	OIL WATER DISPOSAL	X722		بخ	willo-	ے ا		
40502	SLUDGE DISPOSAL			~				
41000	NON HAZARDOUS DISPOSAL							
41001	RCRA WASTE DISPOSAL	, , , , , , , , , , , , , , , , , , , ,						
41500	VAC TRUCK & OPERATOR	/2	00pm	4.35-	2 -117			
41501	DRUM DISPOSAL	ļ						
41502	SEPARATOR CLEANING							
41503	QAQC ANALYTICAL TESTING							
41504	TANK CLEANING				· · ·			
41505	CONFINED SPACE ENTRY				-			
42000 42001	MANIFEST PROCESSING FEE DEXSIL TEST KIT	-						KH0V005304
42001	DEASIE TEST KIT	 					- +	MIOVOCCOT
	, , , , , , , , , , , , , , , , , , , ,	<u> </u>						
						-	TOTA	L
CHARGE	MY ACCOUNT FOR THIS TRANSACTION		Π.	SMALL		PAYM	ENT RECEIV	ED SECTION
	OTHERWISE INDICATED IN THE			QUANTITY ENERATOR	, [ÇASH 🗌	Т	OTAL RECEIVED
INVOICES	REFLECTING CHARGES TO CUSTOMER		CEF	TIFICATIO		CHECK NUMBER		
	JECT TO AN INTEREST RATE OF THE LESSER OF 1½1 UM) OR THE MAXIMUM RATE ALLOWED BY LAW ON		. Ce	ertify that	111	CHECK NUMBER		
ARE NOT	PAID WITHIN 30 DAYS. IN THE EVENT OF DEFAUL	T, LORCO SHALL BE	nazar	rdous wa ns total less t	aste			
	D TO RECOVER COSTS OF COLLECTION, INCLUI Y'S FEES.	JING HEASONABLE	220	220 pounds (100 kg)		PAY	MENT MADE	E SECTION .
	TOR WARRANTS AND REPRESENTS THAT THE MA HEREUNDER HAVE NOT BEEN MIXED, COMBINE			s calendar mo that I am	1 1	PAYMENT MET		PAYMENT AMOUNT
BLENDE	O IN ANY QUANTITY WITH MATERIALS CONTAINING	POLYCHLORINATED	requir	red to use an f	EPA			
	LS (PCB) OR ANY OTHER MATERIAL DEFINED AS I APPLICABLE LAWS, INCLUDING BUT NOT LIMITED T			fication numb	er.	CASH CHECK		
GENERAT	TOR AGREES TO INDEMNIFY AND HOLD LORCO H	ARMLESS FOR ANY	'	- .			RECEIVED	BY
	S, COSTS, ATTORNEY'S FEES, ETC. ARISING OUT (TO A BREACH OF THE ABOVE WARRANTY BY THE		/					
Genera	tor certifies that the waste is		1 70	<u>ر</u>	_ _			
In accordance the N.J.A.C. 7:26-12.1 et seq, LORCO has the required			GENET	TATOR'S SIGNAT	URE	C	USTOMER'S SIG	SNATURE
permits	to accept the above described waste.			LARGE				
Anin	REW L CONFORTUL TOR			DUANTITY				43(5) LORCO has notified
NIV		A JUANUCE .		ENERATOR RTIFICATION		US EPA OFTIS IOCA	tion and used	oil management activities.
Priort Nan				EXSIL CD		Anibal 1	16000	د -
lind	wholl	12/1/94	1 1	ST RESUL	1 5	nt Name	100	<u> </u>
Signature		Date	' - `	, , , , LOOL			25/	19/10
	GENERATOR/CUSTOMER		1/1	111 -	Sig	nature		Bate 5
			ــــا لـــــــا	<u>///-</u> Pl	PM Sig	LOF	RCO REPRESE	NTATIVE
			\sim					

AREA CODE 908 PHONE 469-2202

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ARZULUI	
PO BOX 307 MTN. & SOL	K SALVAGE CO. INC. JTH AVENUE MIDDLESEX, N.J. 08846
NAME MILL	DATE Dec. 8 1994
ADDRESS	B-6 ACADEMY ST
GROSS	WEIGHT
TARE	WEIGHT
भहा	WEIGHT
CUAN I DE	SCRIPTION AMOUNT
Tar	1C-1,000
<u> </u>	
Signature Ras	Hun
	•

APPENDIX C

CLEAN FILL TICKETS

Millington Quality int.

MATERIAL TICKET



01148756

MATERIAL ORDERS (908) 580-3900 SCALE HOUSE (908) 580-3900 **BILLING INQUIRIES (908) 580-3910**

TI	ME OL	JR ORDER NUMBER	TICKET NUMBER	
	2:04	1-2322	01 148756	
GROSS TONS	TONS TARETONS NETTONS		WEIGHED BY	
34.81	11.61	23.20	MAK	

DIRECTIONS:

D

7SE CLINTON AVE EXIT TO HILL-SIDE AVE LT CLINTON RT IRVINE TURNER BLVD TO JONES ST TO NOR FOLK ST RT WARREN TO CONST GAT SEE SHET FOR DUMP LOCSTION

206.83	TONS SHIPPED THIS ORDER TODAY
200.03	LOADS SHPPED THIS ORDER TODAY

OFFICE USE ONLY						
@ @ M S &	* *	TURN	OFF 3	JAKE	BRAKE . **	
AR PLT: LV PLT:			JOB:/	12.40	Ø N/T:	

PO. BOX 407 . STONEHOUSE ROAD MILLINGTON, NEW JERSEY 07946

CUSTOMER NO. 1	P.O. NUMBER	. TRUCK NO.
302473	PO N18867	6319

CUSTOMER NAME:

K.HOUNANIAN CO.OF NORTH JERSEY

DATE	TAX CODE	HAULER CODE	MATLCODE	
12/27/94		106555		

MATERIAL DESCRIPTION:

INCH CLEAN S SOCIETY HILL & UNIVERSITY HGTS NEWARK NORFOLK & W.MARKET

CATHER SIGNATURE mal USTÓNIER SIGNATURE ORIGINAL

Millington Quaily inc.

MATERIAL TICKET



01148773

KH0V005307

MATERIAL ORDERS (908) 580-3900 SCALE HOUSE (908) 580-390(**BILLING INQUIRIES (908) 580-391(**

ונד	ME	OUR ORDER NUMB	ER	TICKET NUMBER		
1	2:09	1-2322		01	148773	
GROSS TONS	TARE TONS	NETTONS		WEIG	HED BY	
35.03	11.70	22.33	·		MAK	

DIRECTIONS:

78E CLINTON AVE EXIT TO HILL-SIDE AVE LT CLINTON RT IRVINE TURNER BLVD TO JONES ST TO NOR FOLK ST RT WARREN TO CONST GAT E SEE SUPT FOR DUMP LOCATION

230.16			ORDER TODAY ORDER TODAY		
		OFFICE U	SE ONLY		
4442ē	**	TURN	OFF JAKE	BRAKE	**
AR PLT:		AR LV	30E:	R/T	•



MILLINGTON, NEW JERSEY 07948

CUSTOMER NO.	P.0	NUMBER	TRUCK NO.	
302473	P 0	N18867	1709	
CUSTOMER NAME.				

HOUNANIAN CO.OF NORTH JERSEY

DATE :	TAX CODE		MATL CODE	
12/27/94	Υ	102142	01-002	D

MATERIAL DESCRIPTION:

	DELVERY ADDRESS	
SOCIETY	HILL @ UNIVERSITY HETS	
	B W.MARKET NEWARK	

CARRIER SIGNATURE STOMER

CRICINAL PAGE 02

K HOV CONST NEWARK

1-501-545-3632

87:41 9661/18/10

MATERIAL TICKET



01143753

MATERIAL ORDERS (908) 580-390(SCALE HOUSE (908) 580-390(**BILLING INQUIRIES (908) 580-391(**

T	IME O	UR ORDER NUMBER	TIC	TICKET NUMBER	
	12:00	1-2322	01	148759	
GROSS TONS	TARE TONS	NETTONS	WEIG	HED BY	
35.16	11.94	23.22		MAK	

DIRECTIONS:

78E CLINTON AVE EXIT TO HILL-SIDE AVE LT CLINTON RT IRVINE TURNER BLVD TO JONES ST TO NOR FOLK ST RT WARREN TO CONST GAT

	TOTAL TODAY	D 1 1 1 1 1 1 1
161.68 7	TONS SHIPPED THIS ORDER TODAY	
	LOADS SHIPPED THIS ORDER TODAY	
	OFFICE USE ONLY	
		<u>-</u>

@@#S@	**	TURN	OFF	JAKE	BRAKE	**
AR PLT: LV PLT:		AR LV	308:	1951	Ď к∕т	:

P.O. BOX 407 . STONEHOUSE ROAD MILLINGTON, NEW JERSEY 07946

-CUSTOMER NO.	P.O. NUMBER	TRUCK NO.
302473	PO N1886?	6302

CUSTOMER NAME:

K. HOVNANIAN CO. OF NORTH JERSEY

TAX CODE	HAULER CODE	MATILCODE	
Y	106555	01-002	g
	YAX CODE		TAX CODE HAULER CODE MATLCODE Y 105555 01-002

1/2 INCH CLEAN STONE SOCIETY HILL & UNIVERSITY HGTS NORFOLK & W.MARKET NEWARK CARRIER SIGNATURE

Quality inc.

ORIGINAL

MATERIAL TICKET

01146763

KH0V005308

MATERIAL ORDERS (908) 580-3900 SCALE HOUSE (908) 580-3900 **BILLING INQUIRIES (908) 580-391**(

T	ME	UR ORDER NUMB	ER TICKET NUMBER
	12:02	1-2322	01 148763
GROSS TONS	TARETONS	NETTONS	* WEIGHED BY
33.80	11.85	21.35	MAK

DIRECTIONS:

THE CLINTON AVE EXIT TO HILL-SIDE AVE LT CLIMTON RT IRVINE TURNER GLVD TO JONES ST TO NOR FOLK ST RT WARREN TO CONST GAT

	F SEE SHET FOR DUMP INCATION
183.63	TONS SHIPPED THIS ORDER TODAY LOADS SHIPPED THIS ORDER TODAY
	OFFICE USE ONLY

@#MS@	**	TURN	OFF	JAKE	BRAKE	**
AR PLT:			JOB :		W/T	:

P.O. BOX 407 . STONEHOUSE ROAD MILLINGTON, NEW JERSEY 07946

CUSTOMER NO.	7	P.C	NUMBER	TRUCK NO.
302473		PO	N18867	1709

CUSTOMER NAME:

HOUNANTAN COLOF NORTH JERSEY

				11/3/1/11 22.	
	Z. DATE	TAX CODE	HAULER CODE	MAT'L CODE	
į	12/27/94	Υ	102142	01-002	D

MATERIAL DESCRIPTION:

<u> </u>	DELWERY ADDRESS -	_
	HILL & UNIVERSITY HGTS & W.MARKET NEMARK	

APPRES PRINT HAME	CARRIER SIGNATURE
USTOMER PRINT NAME	CUSTOMER SICHATURE

APPENDIX D

LABORATORY RESULTS STOCKPILED SOIL

RAYTHEON ENGINEERS & CONSTRUCTORS RAYTHEON ENVIRONMENTAL SERVICES LABORATORY

301 Chelsea Parkway Boothwyn, Pa. 19061 (610) 497-8000

Report For:

Waste Concepts (J.M. Sorce)
Mr. Steve Sands
2230 Dekalb St.
Norristown PA 19401

Job Number

7575631

Summary Number

21611

March 07, 1995

Reviewed by M () Project Manager Michael Hadka

NЈ	ID#	77343	EPA	ID#	PA00078	PA	ID#	23-272
CA	ID#	1924	CO	ID#	PA00078	CT	ID#	PH0687
RI	ID#	A70	DE	ID#	PA00078	WV	ID#	9915(C)
.:c	I D 11	292	::: . `.		M-FA073	30	ID#	a9007
TN	ID#	2927				ИХ	iD#	11345

PaytheonEngineers & Constructors

March 07, 1995

Waste Concepts (J.M. Sorce) Mr. Steve Sands 2230 Dekalb St. Norristown, PA 19401

> Subject: RE&C Contract No. 7575631 Laboratory Analysis

Dear Mr. Sands,

Attached is the analytical report for samples submitted to us on 01/25/1995. Inorganic sample results are reported on an as received basis unless otherwise noted. All organic sample results are reported on a dry weight basis.

All analyses are performed within method required holding times unless noted in a non-conformance report which, if necessary, is located following the method description summary. In addition, any conditions which may aid in the interpretation of the data are noted on this form.

If there are questions regarding this report, please contact me.

Very truly yours,

Joe C. Watt

Director of Technical Services

Raytheon Engineers & Constructors, Inc. Raytheon Environmental Systems Laboratory Data Summary

Summary Number: 21611

Complete	01/26/1995	02/01/1995	01/27/1995	01/26/1995	01/26/1995	02/01/1995	01/27/1995	01/26/1995	01/26/1995	02/01/1995	01/27/1995	01/26/1995	01/26/1995	02/01/1995	01/27/1995	01/26/1995	01/26/1995	02/01/1995	01/27/1995	01/26/1995
Started	01/26/1995	01/31/1995	01/26/1995	01/26/1995	01/26/1995	01/31/1995	01/26/1995	01/26/1995	01/26/1995	01/31/1995	01/26/1995	01/26/1995	01/26/1995	01/31/1995	01/26/1995	01/26/1995	01/26/1995	01/31/1995	01/26/1995	01/26/1995
Sampled	01/19/1995	01/19/1995	01/19/1995	01/19/1995	01/19/1995	01/19/1995	01/19/1995	01/19/1995	01/19/1995	01/19/1995	01/19/1995	01/19/1995	01/19/1995	01/19/1995	01/19/1995	01/19/1995	01/19/1995	01/19/1995	01/19/1995	01/19/1995
	Complete	mg/kg as rec'd	mg/kg as rec'd	% as received	Complete	mg/kg as rec'd	mg/kg as rec'd	% as received	Complete	mg/kg as rec'd	mg/kg as rec'd	% as received	Complete	mg/kg as rec'd	mg/kg as rec'd	% as received	Complete	mg/kg as rec'd	mg/kg as rec'd	% as received
Result		750	1200	11.3		097	095	19.9		86	150	14.2		3300	1700	12.6		2900	4700	16
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soit	Soil								
Analysis Treatment	EXT-TPH DIESEL	TPH Diesel (GC)	IPH SOLID	WATER BY EVAP	EXT-TPH DIESEL	TPH Diesel (GC)	TPH SOLID	WATER BY EVAP	EXT-TPH DIESEL	TPH Diesel (GC)	TPH SOLID	WATER BY EVAP	EXT-TPH DIESEL	TPH Diesel (GC)	TPH SOLID	WATER BY EVAP	EXT-TPH DIESEL	TPH Diesel (GC)	TPH SOLID	WATER BY EVAP
ap o g	763	611	451	908	763	611	124	20 6	763	611	427	908	763	611	457	\$ 00	763	611	427	\$0 \$
Log # Description	J.M.Sorce 1408 WC1	J.M.Sorce 1408 WC1	J.M.Sorce 1408 WC1	J.M.Sorce 1408 WC1	J.M. Sorce 1408 WC3	J.M.Sorce 1408 WC3	J.M.Sorce 1408 WC3	J.M.Sorce 1408 WC3	J.M.Sorce 1406 WC4	J.M.Sorce 1408 WC4	J.M.Sorce 1408 WC4	J.M.Sorce 1408 WC4	J.M.Sorce 1408 WC5	J.M.Sorce 1408 WC5	J.M.Sorce 1408 WC5	J.M.Sorce 1408 WC5	J.M.Sorce 1408 WC7	J.M.Sorce 1408 WC7	J.M.Sorce 1408 uC7	J.M.Sorce 1408 WC7
# 607	81480	81480	81480	81480	81481	81481	81481	81481	81482	81485	81482	81482	81483	81483	81483	81483	81484	81484	81484	81484

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Raytheon Engineers & Constructors, Inc. Raytheon Environmental Systems Laboratory Data Summary

Summary Number: 21611

Complete	01/30/1995 02/01/1995 01/26/1995 01/30/1995 01/27/1995 01/27/1995 01/27/1995 01/27/1995	01/27/1995 01/27/1995 01/27/1995 01/27/1995 02/01/1995 01/27/1995 01/27/1995	03/07/1995
Started	01/30/1995 01/31/1995 01/26/1995 01/30/1995 01/27/1995 01/27/1995 01/27/1995 01/26/1995	01/27/1995 01/27/1995 01/27/1995 01/27/1995 01/27/1995 01/27/1995 01/27/1995	03/07/1995
Sampled	01/19/1995 01/19/1995 01/19/1995 01/19/1995 01/19/1995 01/19/1995 01/19/1995	01/27/1995 01/27/1995 01/27/1995 01/27/1995 01/27/1995 01/27/1995 01/27/1995	01/19/1995
	COMPLETE See Attached See Attached mg/kg as Cl- NEG/YES NEG/YES mg/kg mg/kg Complete % as received	1/6w 1/6w 1/6w 1/6w 1/6w 1/6w 1/6w	CANCEL
Result	ND (20) NEG (8.6) NEG ND (200) ND (400)	ND < 1 1.4 1.4 ND < 1 ND < 1 ND < 1 ND < 0.005 ND < 1 ND < 1	
Matrix	Soil Soil Soil Soil Soil Soil		5011
Analysis Treatment	EXT PCB only SO GC/PCB GC/PID BIEX ORG. HALIDE EOX RCRA Corros. pH RCRA Ignite Reactivity CN Reactivity S ICLP Leachate Metals	Ag Silver As Arsenic Ba Barium Cd Cadmium Cr Chromium Hg Mercury ICP(>5 Metals) Pb Lead	
Ana			Hold
apo o	756PO 614 627UT 103 461 875 875 876 877	2101C 2151C 2171C 2221C 2271C 235vL 291 2491C 2551C	100
Log # Description	J.M. Sorce 1408 UCC	Tclp/#81485 Tclp/#81485 Tclp/#81485 Tclp/#81485 Tclp/#81485 Tclp/#81485 Tclp/#81485 Tclp/#81485 Tclp/#81485	J.M.Sorce 1408 WC8
2>	81485 81485 81485 81485 81485 81485 31485 31485	31486 31486 31486 31486 31486 31486 11486 1486	1552

Approved by:

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Report Prep:

KH0V005313

Raytheon Engineers and Constructors Boothwyn, Pennsylvania Summary #: 21611

Laboratory Data Summary
Total Petroleum Hydrocarbons by Method 418.1
DRY WEIGHT BASIS

lesults Expressed as mg/kg

lumber	Sample	TPH	Percent	TPH
	Description	(as received)	Moisture	(dry weight)
1480	J.M.Sorce T408 WC1	1200	11.3	1400
1481	J.M.Sorce T408 WC3	560	19.9	700
31482	J.M.Sorce T408 WC4	150	14.2	170
1483	J.M.Sorce T408 WC5	1700	12.6	1900
1484	J.M.Sorce T408 WC7	4700	16.0	5600

Raytheon Engineers and Constructors Boothwyn, Pennsylvania Summary #: 21611

Laboratory Data Summary Total Petroleum Hydrocarbons-Diesel by GC DRY WEIGHT BASIS

Results Expressed as mg/kg

Sample	Sample	TPH	Percent	TPH
Number	Description	(as received)	Moisture	(dry weight)
31480	J.M.Sorce T408 WC1	750	11.3	850
31481	J.M.Sorce T408 WC3	460	19.9	570
81482	J.M.Sorce T408 WC4	86	14.2	100
81483	J.M.Sorce T408 WC5	3300	12.6	3800
31484	J.M.Sorce T408 WC7	5900	16.0	7000

LABORATORY ORGANICS DATA SUMMARY Summary # 21611

Log #	Description	Parameter					
81485	I W Conn. 7/00	rai aneter	Result	Limit	Units	Rovd	Analyzed
81485 81485 81485 31485 31485 81485	J.M.Sorce T408 WCC	Aroctor 1221 Aroctor 1232 Aroctor 1016 Aroctor 1242 Aroctor 1260 Aroctor 1248 Aroctor 1254	ND ND ND ND ND	11 11 11 11 11 11	ug/kg ug/kg ug/kg ug/kg ug/kg	01/25/1995 01/25/1995 01/25/1995 01/25/1995	01/31/1995 01/31/1995 01/31/1995 01/31/1995

RAYTHEON ENGINEERS ENVIRONMENTAL LABORATORY

Methods Used for Summary# 21611 :

Code	Description
427	TPH, Solids/ EPA-600/4-79-020 Mtd 418.1 with NJDEP mod
763	Methylene chloride ext. for TPH-Diesel/CA LUFT Method 1989
G11	TPH-Distillates by GC-FID/EPA SW-846 Method 8015 Modified
S06	Water by evaporation/ EPA-600 Mtd 160.3
G27BT	Purgeable Aromatics by GC/PID-BTEX Only/EPA 602/SW-846 8020
103	Organic halide, extractable/EPA-600Mtd450.1-mod/SW846 Mtd9020
756PO	Extraction Procedure PCBs only (solids) / SW-846 Method 3550
G14	PCBs by GC/EPA Method 608/SW-846 Method 8080 (PCBs only)
875	Reactivity, Cyanide/SW-846 Section 7.3.3
876	Reactivity, Sulfide/SW-846 Section 7.3.4
461	RCRA Corrosivity-pH/SW-846 Method 9045
873	RCRA Ignitability/SW-846 Method 1010
877	TCLP Leachate/SW-846 Method 1311
291	ICP (>5 Metals)/EPA-600 Method 200.7/SW-846 Method 6010
210IC	Silver by ICP/EPA-600 Method 200.7/SW-846 Method 6010
215IC	Arsenic by ICP/EPA-600 Method 200.7/SW-846 Method 6010
217IC	Barium by ICP/EPA-600 Method 200.7/SW-846 Method 6010
222IC	Cadmium by ICP/EPA-600 Method 200.7/SW-846 Method 6010
227IC	Chromium by ICP/EPA-600 Method 200.7/SW-846 Method 6010
235VL	Mercury by cold vapor AA/EPA-600 Mtd 245.1/SW-846 Mtd 7470
2491C	Lead by ICP/EPA-600 Method 200.7/SW-846 Method 6010
255IC	Selenium by ICP/EPA-600 Method 200.7/SW-846 Method 6010
100	Miscellaneous Analysis

LABORATORY JOB NO.:	LABORATORY JOB NO. 75.7562
SAMPLERS: PHONE:	SAMPLE
REPORT TYPE:	REP
ANAL YSIS REQUIRED	DISPOSAL: AI
(2)	4.1.4.
75 # J	
TO TO	R DATA PRESERVATIVE PH
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- 1	* X
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1 1	1
+++	
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12	NAME: 1, RAS
75.	:
:	NAME: OF:
:	NAME:

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				71 1100			
de la company de	1	Original - Return w/lteport	1 Yellow - Lab Copy		Pink - Sampler Copy		
Consultant's Name:	(1 M.TE (0	Once pits Tud				,	
Address:	22 30	DETAIR S	•				
Project: , ∫	11 Souce		Consultant Proj #: 45.	950112	Facility ID#	-	
Project Contact.	S S AHDS	٨)	Phone:			-	
Alt. Contact:	\		Phone:		Site Location:		
Contact:			Phone		P.O.#		
Sampled By (print):	WICHONIA)	- A	Sampler's Signature:			-	
SAMPLE I.D. DATE	TIME MATRIX WATER	SAMPLE LOCATIC DESCRIPTION		ANALYSIS REQUIRED Number of Containers	7.		Sample Condition as Received
KHOV005319	SOII	# Vozl	1.81 404 7005 ×376	707 283 8030	49 49	6 3 	Chilled Yes No Sealed Yes No
-1 408 Wel 1/19/45	अध् राज	D. 14 (=)	\ \ \ \ \		<u>+</u>		
1 19 95	15 Sol	Pile (1)					
7408W29 119 95	\dashv	Pilce. (1)	х Х				
4-408WRS 11945 4	1.45 Seil	DIE (1)	✓				
1112 वर	1,05 50'		<u> </u>		>		
5	720	Capa: F. 11(4)	4	<u> </u>	× ×	X	
14000-50 11980	7/2/	1) A166 A1				Extr	tr A
General Comments:				Total #	of Containers: / 🖒		WPO145.B
(1) Relinquished by Signandie	Date Date	25/65	2) Relinquished by Signatures (8	Date /25/43	(3) Relinquished by Signature	ıture	Date
Company. () h-y < ()	Oct) Time:	Company:		Time: // ((,)	Company:		Time:
(1) Received by Sign fure	Date J'UT	-/35 (2) Received by Signature	y Signature	Date [13.	(3) Received by Signature		Date
Company:	11111	Inne 9188 Company	(,,,,	Time. ON - 2-f.	Company:		Time:

\$ 17 c. 16 c. 3

RAYTHEON ENGINEERS & CONSTRUCTORS ENVIRONMENTAL LABORATORY, BOOTHYWN, PA TPH-DISTILLATES GC/FID (METHOD CODE G11)

PH-Diesel Range Organics-GC/FID-METHOD G11

Sample Name : 81480 10g/1ml,1:10 b022026

Page 1

Report No: 998

Feak Processor : Genie

Instrument : ADC_2

Ilculation : ExternalSTD reak Processor : Genie

Multilevel : True Application : Loop

Quantitation: AreaUnits

esult File : /DATA/LOOP/RESULT/D276059.RES : 37.00 Min. Injected on Tue Jan 31, 1995 11:21:19 pm

k# NAME RT Area AMOUNT , 1 C-14 10.76 12859964 2 o-TERPHENYL(Surr) 14.48 49795 2,5

_UMMED AREAS:

SH# NAME RT AMOUNT Area 1 C-14 10.76 12859964 750.0 2 o-TERPHENYL(Surr) 14.48 49795 2,5

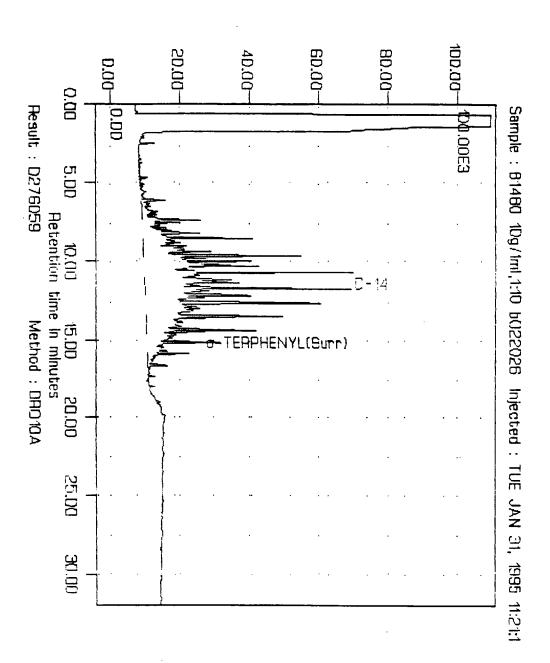
PH Non-Diesel Range Organics: _____ mg/Kg or mg/L NOTE: Non-diesel organics are any hydrocarbons with a boiling range reater than diesel. The result is calculated based on the diesel range calibration standard.

Surrogate Recovery (o-Terphenyl):

Analyst: 12

port Time : Wed Feb 1, 1995 10:32:24 am
sathod : /DATA/LOOP/METHOD/DR010A.MTH

Amplitude / 10E3



;: :

RAYTHEON ENGINEERS & CONSTRUCTORS ENVIRONMENTAL LABORATORY, BOOTHYWN, PA TPH-DISTILLATES GC/FID (METHOD CODE G11)

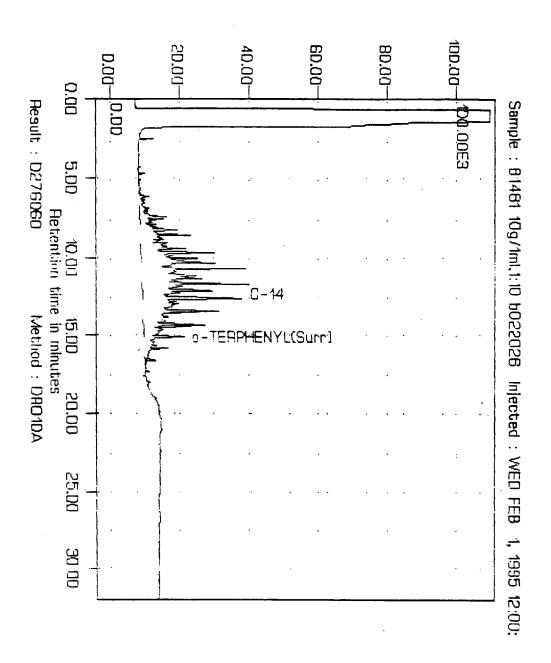
serModified 'PH-Diesel Range Organics-GC/FID-METHOD G11 Page 1 ample Name : 81481 10g/1ml,1:10 b022026 Report No: 999 Peak Processor : Genie Multilevel : True nstrument : ADC_2 Application : Loop
alculation : ExternalSTD Quantitation: AreaUnits
lesult File : /DATA/LOOP/RESULT/D276060.RES
un Time : 37.00 Min. Injected on Wed Feb 1, 1995 12:00:10 am k# NAME RT AMOUNT Area 1 C-14 11.73 7892406 460.3 2 o-TERPHENYL(Surr) 14.48 46542 2.3 JUMMED AREAS: k# NAME RT Area AMOUNT 11,73 1 C-14 7892406 460.3 2 o-TERPHENYL(Surr) 14.48 46542 2.3 TPH Diesel Range Organics: 4/6 mg/kg or mg/l (as received) TPH Non-Diesel Range Organics: _____ mg/Kg or mg/L NOTE: Non-diesel organics are any hydrocarbons with a boiling range greater than diesel. The result is calculated based on the diesel range calibration standard. |Surrogate Resovery (o-Terphenyl): Analyst:

eport Time : Wed Feb 1, 1995 10:36:14 am

: /DATA/LOOP/METHOD/DRO10A.MTH

ethod

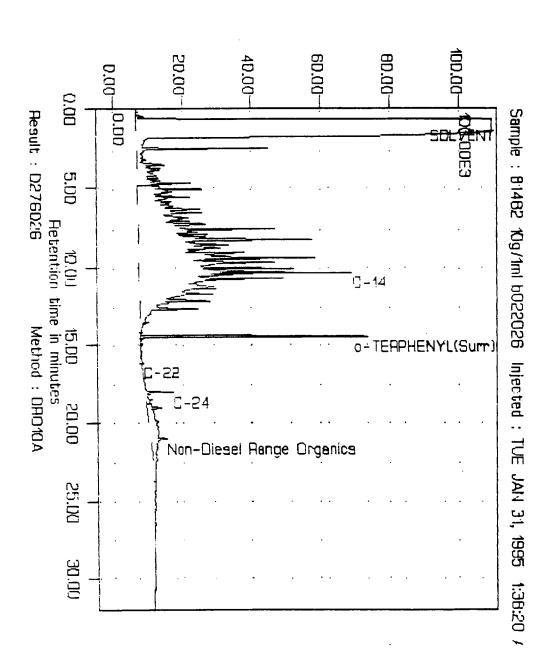
Amplitude / 10E3



: erModified PH-Diesel Range Organics-GC/FID-METHOD G11 Page 1 imple Name : 81482 10g/1ml b022026 Report No: 965 eak Processor : Genie Multilevel : True Application: Loop
Cilculation: ExternalSTD Quantitation: AreaUnits
esult File: /DATA/LOOP/RESULT/D276026.RES
cin Time: 37.00 Min. Injected on Tue Jan 31, 1995 1:38:20 am k# NAME AMOUNT RT Area 40564136 86.5 10.38 14645046 854.1 14.49 343017 17.0 16.17 0 0.0 18.08 129713 7.3 21.06 903685 55.8 1 SOLVENT 2 C-14 3 o-TERPHENYL(Surr) 4 C-22 § 5 C−24 6 Non-Diesel Range Organics 21.06 "JMMED AREAS: :# NAME RTAMOUNT Area 1 SOLVENT 1.08 40564136 86.5
2 C-14 10.38 14774758 861.4 / 10.5 % 1
3 o-TERPHENYL(Surr) 14.49 343017 17.0
6 Non-Diesel Range Organics 21.06 903685 55.8 TPH Mon-Diesel Range Organics: _____ mg/Kg or mg/L NOTE: Non-diesel organics are any hydrocarbons with a boiling range greater than diesel. The result is calculated based on the diesel range calibration standard. Surrogate Recovery (o-Terphenyl): _____ % Analyst: 12

eport Time : Wed Feb 1, 1995 2:19:19 pm : thod : /DATA/LOOP/METHOD/DRO10A.MTH

Amplitude / 10E3



RAYTHEON ENGINEERS & CONSTRUCTORS ENVIRONMENTAL LABORATORY, BOOTHYWN, PA TPH-DISTILLATES GC/FID (METHOD CODE G11)

_erModified

'PH-Diesel Range Organics-GC/FID-METHOD G11 Page 1

mple Name : 81483 10g/1ml,1:20 b022026 Report No: 1000

*Bak Processor : Genie Multilevel : True Application : Loop

Quantitation: AreaUnits

esult File : /DATA/LOOP/RESULT/D276061.RES
In Time : 37.00 Min. Injected on Wed Feb 1, 1995 12:39:02 am

AMOUNT k# NAME RT Area 1 C-14 10.75 28305328 1650.7 0 2 o-TERPHENYL(Surr) 14.48 35385 1.8

JUMMED AREAS:

NAME RTArea AMOUNT 10.75 1 C-14 28305328 1650.7 14.48 35385 2 o-TERPHENYL(Surr) 1.8

TPH Diesel Range Organics: 3300 mg/kg or mg/l (as received)

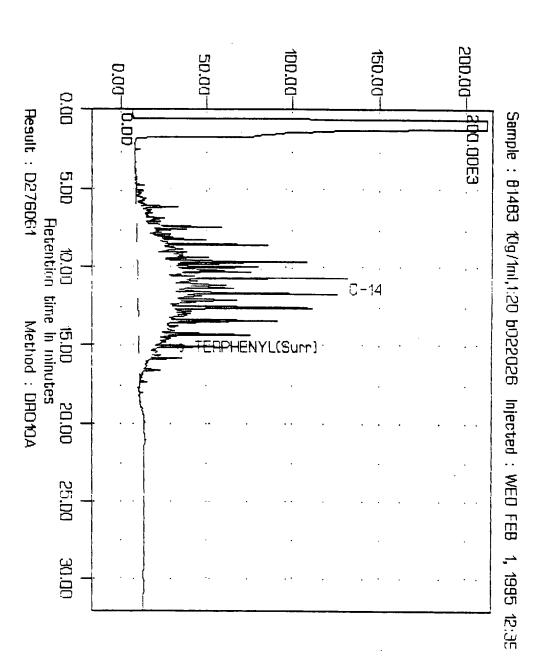
_____ mg/Kg or mg/L TPH Non-Diesel Range Organics: ___ NOTE: Non-diesel organics are any hydrocarbons with a boiling range reater than diesel. The result is calculated based on the diesel range calibration standard.

'urrogate Recovery (o-Terphenyl):

Analyst:

haport Time : Wed Feb 1, 1995 10:39:27 am etnod : /DATA/LOOP/METHOD/DRO10A.MTH

Amplitude / 10E3



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KH0V005327

WALLIEON ENGINEERYS & COMPINGCIONS ENVIRONMENTAL LABORATORY, BOOTHYWN, PA TPH-DISTILLATES GC/FID (METHOD CODE G11)

VerModified

H-Diesel Range Organics-GC/FID-METHOD G11

Page 1

Sample Name : 81484 10g/1ml,1:40

Report No : 1015

Jak Processor : Genie

Multilevel : True

_nstrument : ADC_2

Application : Loop

Quantitation: AreaUnits

Sult File : /DATA/LOOP/RESULT/D277004.RES

ın Time : 37.00 Min. Injected on Wed Feb 1, 1995 12:45:11-pm

NAME

RT

Area

AMOUNT

1 C-14

10.77 25411516 1482.0

: MMED AREAS:

NAME 1 C-14

RT

10.77 25411516 1482.0

Area AMOUNT

IPH Diesel Range Organics: 5700 mg/kg or mg/l

(as received)

PH Non-Diesel Range Organics: _____ mg/Kg or mg/L

NOTE: Non-diesel organics are any hydrocarbons with a boiling range reater than diesel. The result is calculated based on the diesel

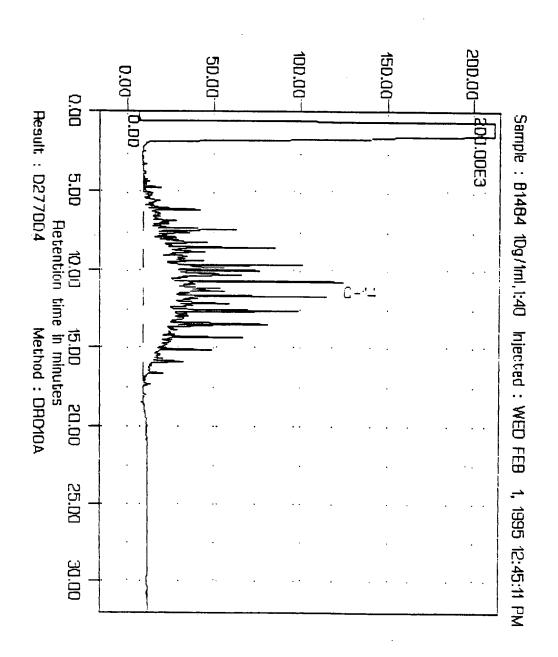
ange calibration standard.

Surrogate Recovery (o-Terphenyl):

Analyst:

Proport Time : Wed Feb 1, 1995 2:04:20 pm
Pathod : /DATA/LOOP/METHOD/DR010A.MTH

Amplitude / 10E3



2E

Lab Name RAYTHEON ENGINEERS

Contract: N/A

Lab Code: N/A

Case No.: N/A

SAS No.: N/A

SDG No.: N/A

EPA SAMPLE NO.	S1 (o-TER)#	OTHER
SAMPLE NO.	(O-1ER)#	
MB007	107	
81480	a	
81481	D	
81482	85	
81483	D	
81484	D	
		
		
	<u> </u>	
		
	· ———	· ——— ·

S1 (O-TER) = O-TERPHENYL

Advisory QC (20-160)

- # Column used to flag recovery values
- ** Interference with TPH
- D Surrogates Diluted Out

page 1 of 1

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FORM II TPH-1

1/87 Rev.

1D PCB ANALYSIS DATA SHEET

LAB SAMPLE # : 81485

MATRIX : SOIL

CLIENT ID : J.M.Sorce T408 WCC

Sample wt/vol : 30g % Moisture : 12.0

ANALYSIS DATE : 01/31/1995

RECVD DATE : 01/25/1995

ID FILE : g14.id

DATA FILE : Q1_269040

Com	pound	Result ug/kg*	Detection Limit ug/kg*
11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1	Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	ND ND ND ND ND ND ND	11 11 11 11 11 11

ND - Not Detected

B - Analyte Also Found in blank

D - Diluted - Estimated

* Dry Weight Basis 0.3788 SUMMARY 21611

RAYTHEON ENGINEERS & CONSTRUCTORS ENVIRONMENTAL LABORATORY, BOOTHWYN PA PCB ANALYSIS REPORT

':erModified

CB1016&1260 METHOD 8081/608/1-91CLP COLUMN: DB608, 150 TO 275 5 DEG/MIN

Page 1

Report No : 629 ample Name : 81485 30g/10ml J009018

: ak Processor : Genie Multilevel : True ### Processor : Genie Multilevel : True | Application : Loop | Application : Loop | Application : ExternalSTD | Quantitation: AreaUnits | Parallel : DATA/LOOP/RESULT/Q1_269040.RES | Quantitation : 32.00 Min. Injected on Tue Jan 31, 1995 12:46:33 pm

. 1	ND	IV	II	DU	AL	PEA	KS:
-----	----	----	----	----	----	-----	-----

:#	RT	AREA	AMOUNT	NAME
32	6,19	1656122	77.86	TCMX (SURR)
45	27,56	1298223	51.14	DCB (SURR)

UMMED TOTAL FOR PCBs:

:'! :#	RT	AREA	AMOUNT	NAME
32	6.19	1656122	77.86	TCMX (SURR)
45	27.56	1298223	51.14	DCB (SURR)

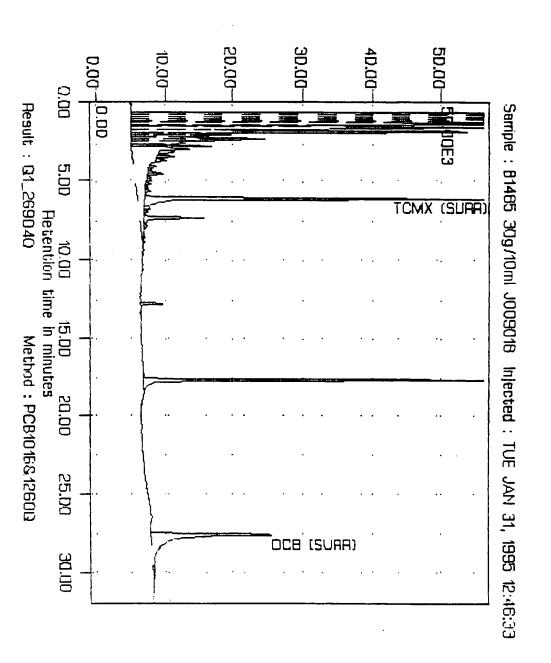
AVERAGE CONCENTRATION: _____

SURROGATE RECOVERY: TCMX = $\frac{7}{8}$ % DCB = $\frac{51}{8}$ % *************

eport Time : Wed Feb 1, 1995 1:59:37 pm : /DATA/LOOP/METHOD/PCB1016&1260Q.MTH :/DATA/LOOP/SEQUENCE/Q1_269.SEQ

Analyst: _ /AL/

Amplitude / 10E3



2E

Lab Name RAYTHEON ENGINEERS

Contract: N/A

Lab Code: N/A

Case No.: N/A

SAS No.: N/A SDG No.: N/A

EPA SAMPLE NO.	S1 (DCB)#	OTHER
MB018 81485 81561 81682 81557 81586 81681 81455 81683 81684 81685 81561MS 81561MS 81561MSD 81347	50 51 40 35 D D 39 D D 57 34 40 287	72 78 70 61 D D D 59 D D D 83 56 64 129

S1 (DCB) = Decachlorobiphenyl

Advisory QC (24-150)

- # Column used to flag recovery values
- * Tetra-chloro-m-xylene surrogate D Surrogates Diluted Out

page 1 of 1

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FORM II PEST-1

1/87 Rev.



VOLATILE ORGANIC COMPOUNDS DATA SHEET

1 AB SAMPLE # : 81485

TRIX : SOIL

CLIENT ID : J.M.Sorce T408 WCC

Sample wt/vol : 0.04G Moisture : 12.0 ANALYSIS DATE: 01/26/1995 RECVD DATE: 01/25/1995 ID FILE: g27bt.id

DATA FILE : c3674

1). 1). 1).	Compound	·	Result (ug/kg)	Detection Limit (ug/kg)
71-43-2	Benzene		ND	71
38-88-3	Toluene		240	71
30-41-4	Ethyl Benzene		85	71
330-20-7	m&p-Xylenes		210	71
95-47-6	0-Xylene		3000	71

ND - Not Detected

J - Indicates an Estimated Value below MDL

B - Analyte Also Found in blank

D - Diluted

E - Estimated

142.0SUMMARY 21611

2E SOIL BTEX SURROGATE RECOVERY

Lab Name: RAYTHEON ENGINEERS

Contract:N/A

	EPA SAMPLE NO.	S1 (BFB)#	OTHER
01 02 03	METHOD BLANK 81485	105 69	
04 05 06			
07 08 09			
10			
11 12 13 14 15			
15 16 17 18			
19 20			
21 22 23 24			
24 25 26 27			
28 29 30			

ADVISORY QC LIMITS (56-140)

S1 (BFB) = Bromofluorobenzene

- # Column used to flag recovery values
- * Values outside of QC limits
- D Surrogates diluted out

page 1 of 1

FORM II PEST-1

1/87 Rev.

APPENDIX E SOIL RECYCLING DOCUMENTATION

FFB 2 ! 1995

State of New Jersey

Department of Environmental Protection

Robert C. Shinn, Jr. Commissioner

Christine Todd Whitman Governor

Division of Solid Waste Management CN 414 Trenton, NJ 08625-0414 Tel. # 609-530-8207 Fax. # 609-530-8899

FEB 1 6 1995

Skip Kelleher K. Hovnanian Companies, Society Hill at University Heights 71 Wickliffe Street Newark, NJ 07103

Dear Sir or Madam:

This is in response to your letter regarding the reuse of petroleum hydrocarbon contaminated soil. Soils containing less than 30,000 ppm total petroleum hydrocarbons, provided they do not contain other hazardous wastes sufficient to classify them as a hazardous waste, are usually classified as ID-27, dry industrial waste. Generally, soils classified as ID-27 must be directed to the designated county solid waste facility permitted to receive such waste for disposal as specified in the solid waste flow rules. However, an exemption to the solid waste regulation as specified at N.J.A.C. 7:26-1.1(a)1, is allowed for solid waste that is separated at the point of generation and sent to an approved facility for reuse. Also, exempted is waste that is handled as hazardous waste, manifested in accordance with the rules and regulations as set forth at N.J.A.C. 7:26-7, and transported directly to a hazardous waste facility from the point of generation.

In order to send ID-27 petroleum hydrocarbon contaminated soil out-of-state pursuant to the exemption to the waste flow directives at N.J.A. C. 7:26-6, our office requires a check made out to the Treasurer, State of New Jersey for the payment of the applicable Recycling Exemption Authorization Review Fee and the following items:

- 1. A letter sent to the Division of Solid Waste Management (Division) from the generator, certifying that the soil in question has been analyzed or is know, in accordance with N.J.A.C. 7:26-8.5, to contain less than 30,000 ppm petroleum hydrocarbons from non-waste sources, or other contaminants which would not cause the soil to be classified as a hazardous waste.
- 2. A letter sent to the Division of Solid Waste Management from the receiving facility stating that they agree to accept the specified amount of soil and indicated their intention to beneficially use or reuse the soil and the time frame for such activity from date of receipt at the facility. In addition, we request that you send this information directly to the solid waste coordinator of the county of the soil's origin.

	. Nomo K. Hovnar	nian at Newark URC II	I Shipping	Location Societ	y Hill @ Uni	v. Hghts
	65 Jackson D		Address	Corner of Ma	atthews and C	hurchman
ddress .	Cranford, NJ				07101	
			Phone !	No		
hone N	o. <u>(908) 218-0</u>	000	Codes			GROSS
	De	scription of Material	Codes	-/-		1
	Approval	Non-Regulated Petroleu	ım	12.65		TARE
	Number	Contaminated Soil		32.10		NET
		Non DOT/RCRA Regula	ted			TONNAGE
_		above named material de				
aw, ha accordi	is been properly ing to applicable			ly	1 ,	
Genera	tor Authorized Ag	ent Name	RANSPOR	/		
Transpo Addres	orter Name U	S BUIK	venic	He Licerise 140.700	4	071 Ps
l herel	by certify that the	le above named material ator site listed above.			t the above N	amed material was nation listed below.
Driver	Jaye Signature	has 2-9-4 Shipment	Date Driv	er signature	m	Delivery Date
Dilvei	Olghaisys		DESTINAT	TION	•	KH0V005339
	Soil Reme	diation of Philadlph	ia, Inc.	Phone N	No. (215)724-5	520
Site N	Valid	st Street Philadelph		9153		
Addre	ess	e above named material h	as been acc	peoted and to the	best of my kno	owledge the foregoing
i here is tru	eby certify that the and accurate.	e above named material in			,	2-9-95
A.1	e of Authorized A	gent	Signature			Receipt Dat
Name		gorit	Yellow - Broke	Pink — Contractor	Goldenrod — Trucking	Co.

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Generator	Name K. Hovnanian at	Newark URC III Shipping	Location Society Hill @ Univ. Hights
	65 Jackson Drive	A 1.1	Corner of Matthews and Churchman
	Cranford, NJ 07016	•	Newark, NJ 07101
_	(908) 218-0066		0.
FIIONS NO.	. <u>1900) 210 999</u>	Codes	46.46 GROSS
	Description	of Material	
	umber i i	Regulated Petroleum	14.10TARE
	1 1	DOT/RCRA Regulated	3236TONNAGE
according Generato	g to applicable regulations r Authorized Agent Nam	e Signature	shipment Date
G 01101010		TRANSPORT	ED
Transport	FSINTHUILL	Driver	Name (Print) 574044 Long
Address	Foundary	e P Vehicle	Number
I hereby	certify that the above	named material was I here	eby certify that the above named material was red without incident to the destination listed below.
Sta	off C	Shilpment Date Spriver	2-9-95 Signature Delivery Date
Driver Si	gnature (DESTINATION	N KH0V005340
	\ Soil Remediation	n of Philadlphia, Inc.	Phone No. (215)724-5520
Site Nar			
Address	3201 S. 618t Street	et Philadelphia, PA 193	oted and to the best of my knowledge the foregoing
I hereby	and accurate.	named material rick System Color	2-9-95
	// [/]		Receipt Date



Log Number	•	•
		- 1

Generator Name K.Hov	manian at Newark URC III	Shipping Location	Society Hill @ Univ.	Hghts
Address 65 Jackson			er of Matthews and Chu	
			ck, NJ 07101	
	NJ 07016			
Phone No. (908) 218	3-0066	Phone No		
		codes 43.	56	GROSS
ļ	Description of Material	1/2	(a)	TARE
Approval Number	Non-Regulated Petroleum	77.2		
	Contaminated Soil	27	56	·NE'
	Non DOT/RCRA Regulated			TONNAGE
or any applicable states isw, has been proper according to applicable Generator Authorized	Agent Name Sig	Parkaged, and in Route	s in proper condition for	transportation
		SPORTER		
Transporter Name		Vehicle Licens	Print) GAPY B e No./State AROSS	712
I hereby certify that picked Op at the gen Driver Signature	the above named material was erator site listed above. Shipment Date	i hereby cei	rtify that the above name cout incident to the destination	d material was
Site Name Soil Re	emediation of Philadlphia,	Inc.	Phone No. (215)724-5520	
	Slst Street Philadelphia,			
AUU1622	the above named material has be	/	d to the best of my knowled	
Name of Authorized	Agent 8	gnature		Receipt Date
j.	Milita - English Green - Garderstor Wallow	Brater Dist _ Cr	mirantor Goldenrod — Trucking Co	

WASTE CONCEPTS

Name K.Bo	wnanian at Newark URC III	Shipping Location Society	Hill & Univ. Hghrs
.coss 65 Jackso	.2	_ Address _Corner of Mat	thews and Churchman
	,	Newark, NJ	7101
Cranford		Phone No.	
Phone No. <u>(908)</u> 2]	18-0066	10.00	0,0000
MARANES LA TRANSITA TRANSITA	- inting of Material	Codes 4/1. 8	GROSS
	Description of Material	1400	TARE
Approval Number	Non-Regulated Petroleum Contaminated Soil	33.37	NET
	Non DOT/RCRA Regulated	d	TONNAGE
according to applica	d Agent Name	Signature NSPORTER	Shipment Date
			1 h DPO L
Transporter Name _	U.S. Bulk	Driver Name (Print)	100000000000000000000000000000000000000
823	313 PoBox 22	Vehicle License No./State	te AB-36556 /R
	vainville Pa	Truck Number _ 36	01-5
t hamby partify the	at the above named material wa		the above named material wa ent to the destination listed below
Marin Marin	2/9/95	· · · · · · · · · · · · · · · · · · ·	Delivery Da
Driver Signature	Shipment Da	ate Driver Signature	·
Dilver dignature	DE	ESTINATION	KH0V005342
	ar i a se malladimhia	, Inc. Phone No	o. <u>(215)724–5520</u>
	Remediation of Philadlphia		
3201 S.	61st Street Philadelphia	1, PA 19153	best of my knowledge the forego
3201 S.	61st Street Philadelphia	1, PA 19153	best of my knowledge the foregoing $2-9-9$



Log Number	•	هجدد.	
			l
1			

Occasion	. Name K. HOV	nanian at Newark URC III	Shipping	Location Society Hill @ Un	iv. Hghts
			_Address	Corner of Matthews and	Churchman
Address	65 Jackson			Newark, NJ 07101	
	Cranford,	NJ 07016	-		
Phone N	o. <u>(908) 21</u> 8	3-0066	Phone N	0	
			Codes	40.96	GROSS
		Description of Material		1165	TARE
	Approval	Non-Regulated Petroleum	11	10.55	
	Number	Contaminated Soil	11	24.4/	NET
ļ		Non DOT/RCRA Regulated	. !!		TONNAGE
L		(4011 50 1) 110 111 1 1 1 1			
or any	applicable sta	the above named material does ate law, is not a hazardous was erly described, classified and	not cont ate as def packaged	ain free liquid as defined by 4 ined by 40 CFR Part 261 or a l, and is in proper condition	io CFR Part 260.10 ny applicable state for transportation
accord	ing to applicat	ole regulations.	Ri	2/9/95	5
		Accet Name //S	ignature	Sylipment I	Date
Genera	tor Authorized	Agent Name	NSPORT	ED	
Transpo Addres	Transporter Name TNO AND RUKGITES Driver Name (Print) DOWALD GARRETT Address RD Vehicle License No./State AA 74513 BA Truck Number 8816				
I herel picked	hy certify that	the above named material wan nerator site listed above.	s I her delive	reby certify that the above received without incident to the dest	named material was ination listed below.
/	Ω	21 - 26-5	_ /	Jarely Jamo	2-9-94
	Janald.	Shipment Dat	e Drive	Signature	Delivery Date
Driver	Signature	- •	STINATI	ON	KH0V005343
	enil D	emodiation of Philadlphia	, Inc	Phone No. (215)724-	5520
Site Name Soil Remediation of Fiffadigital					
Addre	Address 3201 S. 61st Street Philadelphia, PA 19153				
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.					
Δ	·(// \T		Cianaltra		Receipt Date
Name	of Authorized	Agent S	Signature	Pink - Contractor Goldenrod - Trucking	•



Log Number	 •	

Generator Name K.F	ovnanian at Newark URC III	Shipping	Location Society	Hill @ Univ	. Hghts
Address 65 Jacks	on Drive	_ Address	Corner of Mati	thews and Chi	urchman
Cranford	NJ 07016		Newark, NJ 0	7101	
Phone No. <u>(908)</u> 2	18-0066	Phone No)		
		Codes	2001		
	Description of Material	Codes	37.91		GROSS
Approval Number	Non-Regulated Petroleum		16.15		TARE
	Contaminated Soil		23.76		NET
	Non DOT/RCRA Regulated				TONNAGE
•					JONNAGE
	Jan 1				
Generator Authorized		,	_	ympinem bate	
	TRAN	SPORTER	₹		•
Transporter Name	TVBC	Driver Na	ame (Print)	f Davies	<u>.</u>
Address <u>QT 5</u>	43	Vehicle Li	icense No./State	A 61409	PA
Tylors	PORT PA	Truck Nu	imber 8728	159	8
	the above named material was erator site listed above.		certify that the without incident to		
TO TO	2.9.95	-	1		2.9.9
Driver Signature	Shipment Date	Driver Sig	gnature		Delivery Date
	DEST	TINATION		K	H0V005344
Site Name Soil Remediation of Philadlphia, Inc. Phone No. (215)724-5520					
Address 3201 S. 6	lst Street Philadelphia,	PA _ 19153	3		·
hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.					
S.RV.		1/les	4	2-9-	9
Name of Authorized A	gent Sigr	oature			Receipt Date

Green - Gemerator - Yellow - Broker

Pink — Contractor

Goldenrod — Trucking Co.



a water Name V Horm	nanian at Newark URC III Sh	ipping Location Society Hi	11 @ Univ. Hghts
	Ac	dress <u>Corner of Matth</u>	ws and Churchman
Address 65 Jackson	Drive		
Cranford	NJ 07016	Newark, NJ 071	01
Phone No. (908) 218	Di	none No	
Phone No. (908) 215	Cod	des 39.80	GROSS
	Description of Material	15.55	TARE
Approval Number	Non-Regulated Petroleum Contaminated Soil	23.65	NETNET
	Non DOT/RCRA Regulated		TONNAGE
AZ ADV ADDICADIO STE		ature State State	Collection for manage
	TRANS	PORTER	
Transporter Name 2 Address 7/4/4/	SPORT P. A	Truck Number 973	
I hereby certify that	the above named material was nerator site listed above.	I hereby certify that the delivered without incident	e above named material was to the destination listed below.
picked up at the get	J. 9.95	Ed Panif	2-9-85
101 any	Shipment Date	Driver Signature	Delivery Date
Driver Signature	DEST	INATION	KH0V005345
		Phone No. (215)724-5520
	emediation of Philadlphia		
Address 3201 S.	61st Street Philadelphia,	PA = 19153	
Address	t the above named material has be	en accepted and to the bes	t of my knowledge the foregoing
is true and accurat	e.	Mat	2-7-75
2 KV	1 Agent XX Sig	prature .	Receipt Date
Name of Authorized	White - Facility Green - Generator Yellow	- Broker Pink - Contractor Gold	enrod — Trucking Ca



ONCEPTS

Generator Name K. Hovnanian at Newark URC II	Shipping Location Society Fill @ Univ. Fights		
Address _ 65 Jackson Drive	Address Corner of Matthews and Churchman		
Cranford, NJ 07016	Newark, NJ 07101		
Phone No. (908) 218-0066	Phone No.		
m v v d Adamaial	Codes 4274 GROSS		
Approval Description of Material	12.89TARE		
Number Non-Regulated Petroleur Contaminated Soil	298)NET		
Non DOT/RCRA Regulate			
Non DOT/ NonA negation	TONNAGE		
or any applicable state law, is not a hazardous we law, has been properly described, classified and according to applicable regulations.	es not contain free liquid as defined by 40 CFR Part 260.10 aste as defined by 40 CFR Part 261 or any applicable state it packaged, and is in proper condition for transportation Signature Shipment Date		
Transporter Name	NSPORTER Driver Name (Print) Rete Treff w from the Name (Print) Rete Treff w from the No./State XX34m L		
	Truck Number 304		
I hereby certify that the above named material war picked up at the generator site listed above.	I hereby certify that the above named material was delivered without incident to the destination listed below.		
Driver Signature Shipment Da	te Driver Signature Delivery Date		
DE	STINATION VILOUINE 2/6		
	KHOV005346		
Site Name Soil Remediation of Philadlphia, Inc. Phone No. (215)724-5520			
Address 3201 S. 61st Street Philadelphia,			
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
211	Signature Receipt Date		
regino or regino.	Signature Receipt Date low - Broker Pink - Contractor Goldenrod - Trucking Co.		

/ PH (215)278-6902 EAX(215)278-6915



Log Number	- •	•

Generator Name K. Hovnanian a	Shippin	g Location Society Hill @ Un	iv. Hghts	
		s <u>Corner of Matthews and</u>	Churchman	
Address 65 Jackson Drive		Newark, NJ 07101		
Cranford, NJ 0701	6			
Phone No. (908) 218-0066	Phone	No		
Filono ito:	Codes	43.17	GROSS	
Description	n of Material	150	TARE	
Approval Nor	n-Regulated Petroleum	73.3	NET	
Number	Contaminated Soil	2/62	NET	
1 1	į		TONNAGE	
Nor	n DOT/RCRA Regulated			
I hereby certify that the above or any applicable state law, is	named material does not co not a hazardous waste as d	entain free liquid as defined by lefined by 40 CFR Part 261 or led, and is in proper condition	40 CFR Part 260.10 any applicable state n for transportation	
law, has been properly desc according to applicable regula		. 0		
according to applicable 10ga	Low Is	July 3/9/9	Date .	
- Abasized Agent Na	me //Signature	Shipment	Date .	
Generator Authorized Agent Na		RTER	0 1	
Transporter Name	1/2/1/18/14 DO	vor Name (Print) / ERRY	9647 PP	
Vehicle License No./State				
Address RIGE RV.	Tru	uck Number		
	151 1	w that the above	named material was	
I hereby certify that the abo		divered without incident to the oc	, 1	
picked up at the generator sit	e listed above.	\mathcal{L}	ha 2/9/9	
Jews W/2	Shipment Date	over Signature	Delivery Date	
Driver Signature	. /	7	KH0V005347	
	DESTINA	ATION		
•		Phone No. (215)724	-5520	
Site Name Soil Remediat	ion of Philadlphia, Inc.			
	root Philadelphia, PA	19253		
Address Section the sho	ove named material has been a	accepted and to the best of my	knowledge the foregoing	
is true and accurate.	/1	117.4	2-9-95	
		/ (Int)	Receipt Date	
Name of Authorized Agent	Signati	UTE Galdebrod — Triid	kina Ca.	



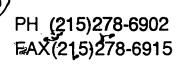
Log Number	•	•

Generator Name K.Hovnanian	at Newark URC III	Shipping Location Society Hill @ 1	Univ. Hghts	
Address 65 Jackson Drive		Address Corner of Matthews an	d Churchman	
Cranford, NJ 07	016	Newark, NJ 07101		
Phone No. (908) 218-0066		Phone No		
	· ·	Codes 1/9 //6		
Descripti	on of Material	Codes 49.16	GROSS	
Approval No	n-Regulated Petroleum	15.57	TARE	
	Contaminated Soil	33.66	NET	
No	n DOT/RCRA Regulated		TONNAGE	
			TONNAGE	
or any applicable state law, is	not a hazardous waste ribed, classified and p	not contain free liquid as defined by e as defined by 40 CFR Part 261 or a packaged, and is in proper condition	any applicable state	
Generator Authorized Agent Nar	ne Sig	nature / Shipment	Date	
	TRANS	SPORTER		
·		72Driver Name (Print) <u>Jin B1</u> 20		
Address RIDGE RD		Vehicle License No./State AB-/	8884 PD.	
		Truck Number 8810		
I hereby certify that the above picked up at the generator site		I hereby certify that the above n delivered without incident to the desti		
1.b1		1. 1		
Driver Signature	2-9-95 Shipment Date	Driver Signature	2-9-95 Delivery Date	
,		INATION	KH0V005348	
Site Name Soil Remediation of Philadlphia, Inc. Phone No. (215)724-5520				
Address 3201 S. 61st Street Philadelphia, PA 19153				
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.				
S.R.P.	(-//	1/4/	2-9-95	
Name of Authorized Agent White - Facility	Green — Geperator Yellow /	nature Broker Pink — Contractor Goldenrod — Trucking Co	Receipt Date	

PH (215)278-6902 FAX(215)278-6915



Generator Name K.Hovnanian at Newark URC III	Shipping Location Society Hill @ Univ. Hights		
Address 65 Jackson Drive	Address Corner of Matthews and Churchman		
Cranford, NJ 07016	Newark, NJ 07101		
Phone No. (908) 218-0066	Phone No.		
•	Codes 47.42 GROSS		
Description of Material			
Approval Non-Regulated Petroleum	76.75 TARE		
Contaminated Soil	<u>30.6/</u> NET		
Non DOT/RCRA Regulated	TONNAGE		
or any applicable state law, is not a hazardous waste law, has been properly described, classified and p	not contain free liquid as defined by 40 CFR Part 260.10 e as defined by 40 CFR Part 261 or any applicable state backaged, and is in proper condition for transportation		
according to applicable regulations.	1		
Generator Authorized Agent Name Sig	nature Shipment Date		
Generale Figure 1	SPORTER /		
Transporter Name Indian Valley Pull	(Driver Name (Print) Jet Duckley		
Address	Vehicle License No./State AA-6/208		
Itlersport a	Truck Number 8722		
I hereby certify that the above named material was picked up at the generator site listed above.	I hereby certify that the above named material was delivered without incident to the pastination listed below.		
Business assorts.	Jell Bues 2-9-95		
Driver Signature Shipment Date	Driver Signature Delivery Date		
DEST	INATION KHOV005349		
Site Name Soil Remediation of Philadlphia, Inc. Phone No. (215)724-5520			
Address 3201 S. 61st Street Philadelphia, P.	A 19153		
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
5aP (-1/1)	arta 2-9-95		
Name of Authorized Agent White - Facility Green - Senerator Yellow -	nature Receipt Date - Broker Pink - Contractor Goldenrod - Trucking Co.		





Log Number	•	•

Generator Name K.Hovnanian at Newark URC III	Shipping Location Society Hill @ Univ. Hights
Address 65 Jackson Drive	Address Corner of Matthews and Churchman
Cranford, NJ 07016	Newark, NJ 07101
Phone No. (908) 218-0066	Phone No.
Approval Number Description of Material Non-Regulated Petroleum Contaminated Soil Non DOT/RCRA Regulate	25.6)NET
or any applicable state law, is not a hazardous was law, has been properly described, classified and according to applicable regulations.	s not contain free liquid as defined by 40 CFR Part 260.10 ste as defined by 40 CFR Part 261 or any applicable state packaged, and is in proper condition for transportation Part 260.10 Part 261 or any applicable state packaged, and is in proper condition for transportation Part 260.10 P
Transporter Name Inclian lawy Address Light Rd. Tylespurt Ta	NSPORTER Driver Name (Print) WAYWE REIMAN Vehicle License No./State AB 50243 - a Truck Number 94/6 - 8/3
I hereby certify that the above named material was picked up at the generator site listed above. $2-9-95$	I hereby certify that the above named material was delivered without incident to the destination listed below. Drive Signature Delivery Date
	Driver Signature Delivery Date STINATION KHOV005350
Site Name Soil Remediation of Philadlphia,	Inc. Phone No. (215)724-5520
Address 3201 S. 61st Street Philadelphia,	PA 19153
I hereby certify that the above named material has be is true and accurate.	een accepted and to the best of my knowledge the foregoing
Name of Authorized Agent Sig	gnature Receipt Date



Log Number	•
.	

Generator Name K. Hovnani				
Address 65 Jackson Dri	ve	Address	Corner of Matthews an	d Churchman
Cranford, NJ	07016	<u>.</u>	Newark, NJ 07101	
Phone No. (908) 218-006	56	Phone No	0	
Desc	ription of Material	Codes		GROSS
Approval Number	Non-Regulated Petroleum Contaminated Soil			TARE
	Non DOT/RCRA Regulated			TONNAGE
I hereby certify that the all or any applicable state law law, has been properly caccording to applicable re-	v, is not a hazardous wasted lescribed, classified and page gulations.	n 90 naiii	and is in proper condition	
	TRAN	SPORTE	:R	
Transporter Name 10		Vehicle	Name (Print) STEVE License No./State AAS Number 9914	8>>5
I hereby certify that the a picked up at the generator	above named material was site listed above.	I herel	by certify that the above ed without incident to the de	named material was
Thut	Shipment Date	Driver	$\frac{1}{2}$ $\frac{2}{9}$ Signature	Delivery Date
Driver Signature	,	TINATIO	•	KH0V005351
Site Name <u>Soil Remedi</u>	ation of Philadlphia,	Inc.	Phone No. <u>(215)724</u>	
	Street Philadelphia,	- /		
I hereby certify that the at is true and accurate.	pove named material has be	en accept	ed and to the best of my kr	nowledge the foregoing
Name of Authorized Agent	Sig	nature		Receipt Date
White — I		/ — Broker - F	Pink - Contractor Goldenrod - Truckin	g Co

рн (215)278-6902 FAX(215)278-6915



Log Number	•	•	•

NON-HAZARDOUS MATERIAL MANIFEST GENERATOR

nerator Name K. Hovr	manian at Newark URC III Shipp	ing Location Society Hill @ Univ. Hights
dress 65 Jackson	Drive Addre	ess Corner of Matthews and Churchman
Cranford, N		Newark, NJ 07101
one No. (908) 218-	0066 Phone	e No
	Codes Description of Material	36.62 GROSS
Approval	Non-Regulated Petroleum	15.60 TARE
Number	Contaminated Soil	21.62 NET
	Non DOT/RCRA Regulated	TONNAGE
has been properlicable ording to applicable nerator Authorized Ag	y described, classified and packag regulations.	lefined by 40 CFR Part 261 or any applicable state ed, and is in proper condition for transportation shipment Date
dress Ridg F	Vehic	er Name (Print) ROBERT C. Corul cle License No./State A 84178
ereby certify that the ked up at the genera		ereby certify that the above named material was vered without incident to the destination listed below.
Slett Gn iver Signature	Shipment Date Drive	er Signature Delivery Date
	DESTINAT	TION KHOV005352
e Name Soil Remed	diation of Philadlphia, Inc.	Phone No. (215)724-5520
dress 3201 S. 61st	t Street Philadelphia, PA 19	153
	above named material has been acco	epted and to the best of my knowledge the foregoing
ame of Authorized Ag	ent Signature	Peccept Date

Pink -- Contractor

Goldenrod — Trucking Co.

РН -(215)278-6902 FAX (215)278-6915



1	Log Number			.	

Generator Name K.Ho	ovnanian at Newark URC III	Shipping	Location Society Hill @ Univ. Hights
Address 65 Jackson	on Drive	_ Address	Corner of Matthews and Churchman
Cranford	, NJ 07016		Newark, NJ 07101
Phone No. (908) 23	18-0066	Phone No	D
		Codes	45.96 GROSS
	Description of Material		11
Approval Number	Non-Regulated Petroleum		7(0.3) TARE
	Contaminated Soil		27.4/NET
	Non DOT/RCRA Regulated		TONNAGE
and a second and the sale	ate law, is not a hazardous wast erly described, classified and	ia ar datir	in free liquid as defined by 40 CFR Part 260.10 and by 40 CFR Part 261 or any applicable state and is in proper condition for transportation
	()01/	railes.	2/9/95
Generator Authorized	Agent Name Sig	gnature	Sylipment Date
	V TRAN	SPORTE	R
Transporter Name Address Address	Leispor + Rr	Vehicle	Name (Print) DOVA 12 6ARRETA License No./State A A 7 L 15 13 P A umber 88 16
I hereby certify that picked up at the gen	the above named material was erator site listed above.	I hereb delivere	by certify that the above named material was distributed below.
Cambridge	Vant 29.95	- On	Palitant Bato
Driver Signature	Shipment Date	Driver S	Signature Delivery Date
		TINATIO	
Site Name Soil Re	emediation of Philadlphia,	Inc.	Phone No. (215)724-5520
	Slst Street Philadelphia,	/	53
	the above named material has be	en accepti	ed and to the best of my knowledge the foregoing
is true and accurate.			2.9-95
Name of Authorized		gnature	Receipt Date
V	White - Facility Green - Generator Yellow	- Broker Pi	ink — Contractor Goldenrod — Trucking Co.



Log Number	 	1
		ı

Generator	Name K.Ho	vnanian at	Newark URC III	Shipping	Location Society Hill @ Un	iv. Hghts
Address _	65 Jackso	n Drive		_ Address	Corner of Matthews and	Churchman
	Cranford,	NJ 07016		- ,	Newark, NJ 07101	-
Phone No	o. <u>(908) 21</u>	8-0066		Phone No	o	
				Codes	43.20	GROSS
<u>Γ</u>	oproval	Description			1625	TARE
	umber		Regulated Petroleum ontaminated Soil		26.95	NET
		Non D	OT/RCRA Regulated		`	TONNAGE
law, has according	pplicable sta been propo to applicable Authorized	erly describe de regulation	ed, classified and page 18.	e as definition backaged, Balu Jinature	1 2/5/95	for transportation
			TRAN	SPORTE	R	
Transport	er Name			Driver N	lame (Print) James Hocks	uberry
Address _				Vehicle l	icense No./State PA-RA 4	6173
				Truck N	umber 9408	
	certify that at the gene		amed material was ed above.		y certify that the above na d without incident to the destin	
Jam	in Holan	nlennu	2-9-95 Shipment Date	7	men Herentony	2-10-95
Driver Sig	nature)	Shipment Date	Driver S	ignature	Delivery Date
,			DEST	rination		KHOV005354
Site Nam	e Soil Ren	mediation o	of Philadlphia,	Inc.	Phone No. (215)724-552	20
Address	3201 S. 61	st Street	Philadelphia, I	PA 19153	3	
I hereby				′ /	d and to the best of my know	edge the foregoing $11 - 91$
Name of	Authorized A	gent	Sig	pature	(1)	Receipt Date
		_	/ 7		nk — Contractor Goldenrod — Trucking Co.	



Log Number	•	•

Generator Name K.Hovnanian at	Newark URC III	_ Shipping	Location Society	y Hill @ Univ	7. Bahts
Address 65 Jackson Drive			Corner of Mat		
Cranford, NJ 07016		- *• *•	Newark, NJ (or comen
Phone No. (908) 218-0066		Phone N	7	'	
			110 -		
Description of	Material	Codes	43.99		GROSS
Approval Number Non-Reg	gulated Petroleum		16.15		TARE
Cont	taminated Soil		27.84		
Non DOT	T/RCRA Regulated				NET
	•				_TONNAGE
I hereby certify that the above namer or any applicable state law, is not a law, has been properly described, according to applicable regulations.	Classified and n				
Generator Authorized Agent Name	Sign	nature /	<i>f</i> / '	Snipment Date	
	TRANS	PORTER			•
ransporter Name TUBC		Driver Ne	(D::-4) T-	~~>	_
ddress PT ~ 5			me (Print)		
			cense No./State		Ra
Tylens Port f		Truck Nur	mber <u>872</u>	8 - 15	<u> </u>
hereby certify that the above name icked up at the generator site listed a	ed material was above.	l hereby delivered	certify that the without incident to	above named the destination	material was listed below.
	2-9-05		3		
river Signature	Shipment Date	Driver Sign	nature 5		Delivery Date
	DESTI	NATION		ſ	
Soil Pomodiation of m					KH0V005355
te Name Soil Remediation of P			_ Phone No. (215	5)724-5520	
ddress 3201 S. 61st Street Ph	iladelphia, PA	19153			
nereby certify that the above named true and accurate.	material has been	accepted a	and to the best of	my knowledge	the foregoing
SIP.	H	11/1/1	//	2-	11-9
ime of Authorized Agent	Signat	wre			Receipt Date



Log Number	 •
. *	l

Generator Name K.Hovnanian at Newark URC III	Shipping Location Society Hill @ Univ. Hahts
Address 65 Jackson Drive	Address Corner of Matthews and Churchman
_Cranford, NJ 07016	Newark, NJ 07101
Phone No. (908) 218-0066	Phone No.
Description of Material	GROSS GROSS
Approval Non-Regulated Petroleum	15-55 TARE
Contaminated Soil	26.8) NET
Non DOT/RCRA Regulated	
	TONNAGE
	ot contain free liquid as defined by 40 CFR Part 260.10 as defined by 40 CFR Part 261 or any applicable state ackaged, and is in proper condition for transportation
TRANSI	
Transporter Name Idain VAIIEY BULK, Address Tylersport P.A.	Driver Name (Print) 2d Paige TR,
I hereby certify that the above named material was picked up at the generator site listed above.	I hereby certify that the above named material was delivered without incident to the destination listed below.
ad Paris p 2-9-95	Ed Parish 2-10-95
Driver Signature Shipment Date	Driver Signature Delivery Date
DESTIN	KHUVUUD3DD
Site Name Soil Remediation of Philadlphia, Inc	Phone No. (215)724–5520
Address 3201 S. 61st Street Philadelphia, PA	19153
hereby certify that the above named material has been as true and accurate.	accepted and to the best of my knowledge the foregoing
Name of Authorized Agent	Receipt Date
White - Facility Green - Generator Yellow - Brok	



Log Number	•	.

Generator Name K.Ho	ovnanian at Newark URC III	Shipping	Location Society Hill @ U	hiv. Hghts
Address 65 Jackson	on Drive	_ Address	Corner of Matthews and	l Churchman
Cranford	NJ 07016	<u>.</u>	Newark, NJ 07101	· .
Phone No. (908) 21	18-0066	Phone No	0	
	,	Codes	42.69	GROSS
	Description of Material		12 /	GROSS
Approval Number	Non-Regulated Petroleum		16.6)	TARE
	Contaminated Soil		30.04	NET
	Non DOT/RCRA Regulated	- 11		TONNAGE
				TONNAGE
or any applicable sta	the above named material does to law, is not a hazardous wasterly described, classified and pole regulations.	e as defin	ed by 40 CFR Part 261 or a	ny applicable state for transportation
Generator Authorized	Agent Name /Sig	nature	Shipment D	Date
	TRANS	SPORTER	R	· •
•	15 Bolk	Driver N	lame (Print) Wayne	Snit!
Address	entamulle 19	Vehicle L	icense No./StateAD	1967174
		Truck Nu	umber 301-6	
	the above named material was arator site listed above.	delivered	y certify that the above nad without incident to the destination (
Ways on	7-10-9-		tup frus -	2-10-95
Driver Signature	Shipment Date	Driver Si	gnatøre	Delivery Date
	DEST	INATION	I	KH0V005357
Site Name Soil Ren	mediation of Philadlphia, 1	Inc.	Phone No. (215)724-55	
Address 3201 S. 63	lst Street Philadelphia, F	PA 19153	3	
I hereby sertify that the isstrue and accurate.	ne above named material has bee	n accepted	and to the best of my know	rledge the foregoing
Name of Authorized A	gent Sign	ature Broker Pink	k — Contractor Goldenrod — Trucking Co.	Receipt Date

£4:



Log Number	•	•	
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NON-HAZARDOUS MATERIAL MANIFEST **GENERATOR**

Generator Name K.H.	ovnanian at Newark URC III	_ Shipping Location Society Hill & U	niv. Hghts
Address 65 Jackson	on Drive	_Address _ Corner of Matthews and	Churchman
	NJ 07016	- Newark, NJ 07101	
Phone No. (908) 2]	4	** :	
		Codes 44.90	GROSS
Approval	Description of Material	12 500	
Number	Non-Regulated Petroleum		TARE
	Contaminated Soil	32.01	NET
	Non DOT/RCRA Regulated	÷	TONNAGE
			- ↓.
or any applicable sta	ate law, is not a hazardous wast perly described, classified and p	not contain free liquid as defined by 4 se as defined by 40 CFR Part 261 or a packaged, and is in proper condition	ny applicable state
Generator Authorized	Agent Name // Sig	nature Shipment C	Date
	TRAN	SPORTER	_
Transporter Name	US Bull	Driver Name (Print) Pete Tr	EALLWAY
Address			
		Vehicle Lipense No./State XX3 m Truck Number	
I hereby certify that picked up at the gen	the above named material was erator site listed above.	I hereby certify that the above no delivered without incident to the destin	
2-1-1		4	
Driver Signature	Shipment Date	Drivet Signature	Delivery Date
onto, orginals	\mathcal{J}	FINATION	KH0V005358
Site Name Soil Rem	ediation of Philadlphia, Ir	nc. Phone No(215)724-552	- •
Address 3201 S. 61	st Street Philadelphia, PA	19153	
I hereby certify that t is true and accurate.	the above named material has bee	en accepted and to the best of my know	viedge the foregoing
Name of Authorized A	Agent Sign	nature d	Receipt Date
	White — Facility Green — Generator Wellow —	/ - Broker Pink Contractor Goldenrod Truc∞ng Co.	,



Generator	Name K.Hovi	nanian at Newar	k URC III	Shipping	Location Societ	v Hill 0 mm	v Hohto
Address _	65 Jackson	Drive	·		Corner of Ma		
	Cranford, N	V 07016		_			Mindelphats
 Phone Ne	(908) 218-			•	Newark, NJ	07101	
PHONE NO	. (306) 216-	-0066		Phone N	0		
	proval	escription of Mater	rial	Codes	43.64 1410		GROSS
		Contamina		11	2401		IARE
		Non DOT/RCR/	A Regulated		<u>~/.74</u>		NET
							TONNAGE
iaw, has i	been properly to applicable		for Bai	ckaged,	ed by 40 CFR Pa and is in prope	art 261 or any or condition for	-rn Part 260.1(applicable state r transportation
Generator A	Authorized Age	nt Name	Signa	ture		Shipment Date	-
Transporter Address	Name US	Boll ny Ne Pa		Driver Na	time (Print).	AB0047	
I hereby ce picked up a Driver Signal	the generator	above named mat site listed/above.	terial was I	hereby delivered	certify that the without incident to hature	above named	isted below.
			DESTINA		_	K	H0V005359
Site Name S	Soil Remedia	tion of Philad	lphia, Inc.	Æ	_ Phone No. (21:		
Address 320	01 S. 61st S	treet Philade	lphia, PA	19153		5,724-3320	
5a	tify that the aborder t	ove named materia	A. T.	Mille	and to the best of	f my knowledge	the foregoing
	White - Fa	cility Green — Generato	Signatur Yellow – Broke		Contractor Goldenrod	- Trucking Co.	Receipt Date



Log Number	٠	•
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Generato	r Name K.Hovnanian a	at Newark URC III	Shipping	Location Society Hil	l @ Univ. Hghts
Address	65 Jackson Drive		Address	Corner of Matthew	s and Churchman
· · · · ·	Cranford, NJ 070	16	_	Newark, NJ 07101	
Phone No	o. <u>(908) 218–0066</u>		Phone No	o	
			Codes	1/2 . 1.	
	Description	n of Material	Occues	43.45	GROSS
	iduibei	-Regulated Petroleum		14.60	TARE
	(Contaminated Soil		29.45	NET
<u>L</u>	Non	DOT/RCRA Regulated			TONNAGE
iaw, has	been properly descri g to applicable regulation	bed, classified and pons.	backaged, Built	and is in proper con	or any applicable state dition for transportation
Generato	r Authorized Agent Name	e //Sig	nature	/ Shipr	nent Date
		TRAN	SPORTE	R	
Transport	ter Name Vis, B	11K	Driver N	lame (Print)	Nelles
	BRT 313	Po Box 2m	Vehicle L	icense No./State AB	-3655b /fg
	FOUNTAIN VILLY	P5	Truck No	umber <u>301-5</u>	
•	certify that the above p at the generator site list			•	ve named material was destination listed below.
9	Ar	2/10/95	Vu/	M	2/10/95
Driver Sig	gnature	Shipment Date	Driver Si	ignature	Delivery Date
		DEST	OITANI	1	KH0V005360
Site Nam	soil Remediation	of Philadlphia, I	inc.	Phone No. (215)7:	24–5520
Address	3201 S. 61st Street	t Philadelphia, P	PA → 19153	3	
l hereby	certify that the above name accurate.	amed material has bee	n accepted	d and to the best of my	knowledge the foregoing $2 - 10 - 9$
Name of	Authorized Agent White - Facility	Sign Green — Generato: Yellow —	nature Broker Pini	k — Contractor Goldenrod — Trui	Receipt Date

Goldenrod — Trucking Co.

1 -09	MAILING	ı	
- 1			
1			
- 1			
L			

Generator Name K.Ho	vnanian at Newark URC III	Shipping Location Society Hill @ Un	iv. Aghts
Address 65 Jackso	n Drive	Address Corner of Matthews and	Churchman
Cranford,	NJ 07016	Newark, NJ 07101	
Phone No. (908) 21	8-0066	Phone No	······································
		Codes Hagn	GROSS
	Description of Material		
Approval Number	Non-Regulated Petroleum Contaminated Soil		
	Non DOT/DCRA Requisted		NET
<u> </u>	Non DOT/RCRA Regulated		TONNAGE
law, has been prope according to applicab	erly described, classified and label regulations.	te as defined by 40 CFR Part 261 or an packaged, and is in proper condition Tailey gnature Shipment Da	for transportation
Generator Authorized		<i>y</i>	ne
		ISPORTER	_
Transporter Name	15 Bulk	Driver Name (Print) Wayne	Smith
Address For	stanuille PA	Vehicle License No./State	907180
		Truck Number 301-6	
	the above named material was trator site listed above.	I hereby certify that the above nar delivered without incident to the destination	
- Carpe	7-10-95	hayre from 2	10-95
Driver Signature	Shipment Date	Driver Signature	Delivery Date
•	DEST	TINATION	KH0V005361
Site Name Soil Rem	ediation of Philadlphia, I	Inc. Phone No. (215)724-552	<u> </u>
Address 3201 S. 61	st Street Philadelphia, P	PA 19153	
I hereby certify that the is true and accurate.	ne above named material has bee	en accepted and to the best of my knowle	edge the foregoing
Name of Authorized A	gent Sig.	rature '	Receipt Date
Wh	ite - Facility Green - Generator Yellow -	Broker Pink — Contractor Goldenrod — Trucking Co.	



Generator Name K.H	ovnanian at Newark URC III	Shipping Location Society Hill @ Univ. Ho	<u>ihts</u>
Address 65 Jacks	on Drive	Address <u>Corner of Matthews and Church</u>	man
Cranford	, NJ 07016	Newark, NJ 07101	
Phone No. <u>(908) 2</u>	18-0066	Phone No.	
		Codes 44.63	00000
	Description of Material		GROSS
Approval Number	Non-Regulated Petroleum	15.70	TARE
	Contaminated Soil	28.93	NET
	Non DOT/RCRA Regulated	Пто	NNAGE
law, has been propactoring to applica	perly described, classified and public regulations.	e as defined by 40 CFR Part 261 or any applications and is in proper condition for training the second seco	nsportation
	TRAN	SPORTER	
Transporter Name		Driver Name (Print) JACK P. dg WA	1
Address	odstown mj.	Vehicle License No./State XY548P	
	08098	Truck Number	
•	the above named material was erator site listed above.	I hereby certify that the above named madelivered without incident to the destination list	
l al	74	Jack Rilaway	
Driver Signature	Shipment Date	Driver Signature De	elivery Date
-	DEST	INATION	10V005362
Site Name Soil Re	mediation of Philadlphia, I	nc. Phone No. (215)724-5520	
Address 3201 S. 6	lst Street Philadelphia, P	A 19153	
hereby certify that t is true and accurate.	the above named material has bee	n accepted and to the best of my knowledge the	e foregoing
Name of Authorized (Agent Size	2-10	5-4
Name of Authorized A w	Agent Sign Thite — Facility Green — Generator Yellow —		leceipt Date